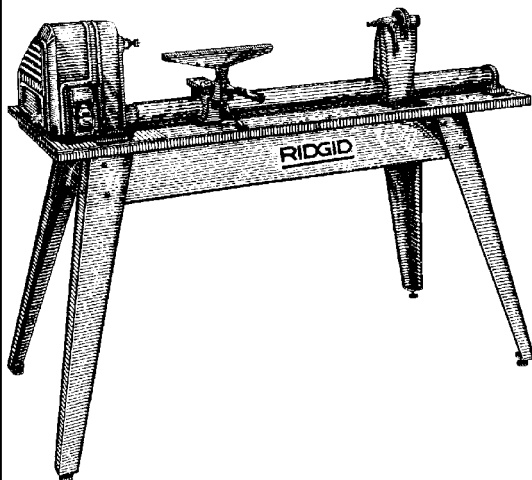


**RIGID**®

# WL1200LS OPERATOR'S MANUAL



## 12 INCH WOOD TURNING LATHE

**⚠ WARNING:** To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

**SAVE THIS MANUAL FOR  
FUTURE REFERENCE**

# Table of Contents

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Section	Page	Section	Page
<b>Table of Contents</b> .....	<b>2</b>	Adjusting Tailstock .....	21
<b>Safety Instructions For Wood Turning</b>		Aligning Centers .....	21
<b>Lathe</b> .....	<b>2</b>	<b>Getting To Know Your Wood Lathe</b> .	<b>22</b>
Safety Symbols .....	3	On-off Switch .....	23
Before Using the Lathe .....	3	Speed Chart .....	23
When Installing Or Moving the Lathe	4	<b>Basic Lathe Operations</b> .....	<b>24</b>
Before Each Use .....	4	Changing Speeds .....	24
To Reduce the Risk of Injury From		Spindle Turning .....	25
Jams, Slips Or Thrown Pieces		Faceplate Turning .....	27
(Kickbacks Or Throwbacks) .....	4	Indexing .....	29
Plan Ahead To Protect Your Eyes,		<b>How To Use Your RIDGID</b>	
Hands, Face and Ears .....	5	<b>Wood Lathe</b> .....	<b>30</b>
Inspect Your Workpiece .....	6	Woodworking Chisels and How to Use	
Whenever Lathe Is Running .....	6	Them .....	30
Before Leaving the Lathe .....	6	The Six Commonly Used Chisel	
<b>Motor Specifications and Electrical</b>		Types .....	30
<b>Requirements</b> .....	<b>7</b>	Selection Of Chisels .....	30
Power Supply and Motor		Theory Of Turning .....	30
Specifications .....	7	Using The Gouge .....	33
General Electrical Connections .....	7	Using The Skew .....	33
110-120 Volt, 60 Hz. Tool Information	7	Using The Parting Tool .....	34
Motor Safety Protection .....	8	Using The Scraping Chisels .....	34
Wire Sizes .....	9	Hand Positions .....	35
Check Motor Rotation .....	9	Making Standard Cuts .....	36
<b>Unpacking and Checking Contents</b> ...	<b>9</b>	How To Handle Spindle Turnings	40
Tools Needed .....	9	Duplicate Turnings .....	41
Unpacking .....	9	Long Spindles .....	42
List of Loose Parts .....	10	Faceplate & Chuck Turnings .....	42
<b>Assembly</b> .....	<b>11</b>	How To Make Fancy Faceplate Turn-	
Assembling Steel Legset .....	11	ings .....	43
Holes Used for Mounting Boards and		Sanding, Buffing And Polishing	46
Wood Lathe to Leg Set .....	12	<b>Wiring Diagram</b> .....	<b>47</b>
Mounting Left Side Table Top .....	12	<b>Maintenance</b> .....	<b>47</b>
Mounting Right Side Table Top .....	13	Maintenance .....	47
Mounting Headstock .....	14	Lubrication .....	47
Mounting the Motor .....	15	<b>Recommended Accessories</b> .....	<b>47</b>
Headstock, Tailstock, and Tool Rest As-		<b>Troubleshooting</b> .....	<b>48</b>
sembly .....	17	General .....	48
Mounting Rear Foot .....	19	Motor .....	49
Spur and Cup Center Installation	20	<b>Repair Parts</b> .....	<b>51</b>
Check Spindle Rotation .....	21		

## Safety Instructions For Wood Turning Lathe

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The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding.

The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

# Safety Instructions For Wood Turning Lathe (continued)

## Safety Symbols

**⚠ DANGER:** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING:** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION:** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that may cause property damage.

**NOTE:** Advises you of information or instructions vital to the operation or maintenance of the equipment.

**⚠ WARNING:** Do not attempt to use the tool until you have read thoroughly and understand completely the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use this tool properly and only for what it is intended, you will enjoy years of safe, reliable service.

## Before Using the Lathe

**⚠ WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

**⚠ WARNING:** To reduce the risk of mistakes that could cause serious, permanent injury, do not plug the lathe in until the following steps have been satisfactorily completed.

## Know and Understand the Lathe

- Completely assemble and align lathe.
- Learn the use and function of the ON-OFF switch.
- Review and understand all safety instructions and operating procedures in this manual.
- Review the maintenance methods for this lathe.
- Find and read the warning label found on the lathe (shown below).

### **⚠ WARNING**

1. Read manual before using lathe.
2. Wear safety goggles that meet ANSI Z87.1 or in Canada CSA Z94.3-99 standards.
3. Do not wear gloves, necktie or loose clothing.
4. Tighten all locks before operating.
5. Rotate workpiece by hand before applying power.
6. Rough out workpiece before installing on faceplate.
7. Do not mount split workpiece or one containing knot.
8. Use lowest speed when starting new workpiece.
9. Do not expose to rain or use in a damp location.

# Safety Instructions For Wood Turning Lathe (continued)

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## When Installing Or Moving the Lathe

### Reduce the Risk of Dangerous Environment.

- Use the lathe in a dry, indoor place protected from rain.
- Keep work area well lighted.

### To reduce the risk of injury from unexpected lathe movement.

- The lathe and motor must be bolted down to a stand or workbench for stability.
- To reduce the risk of injury from electrical shock, make sure your fingers do not touch the plug's metal

prongs when plugging in or unplugging the lathe.

- Turn off and unplug the lathe before moving it to a new area. To reduce the risk of back injury, get help when you need to lift or move the lathe.

- **Never Stand On Tool.** Serious injury could occur if the tool tips or you accidentally hit the cutter head. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

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## Before Each Use

### Inspect your lathe.

- To reduce the risk of injury from accidental starting, turn the switch off, unplug the lathe, and remove the switch key before changing the speeds, changing the setup, or adjusting anything.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, unit stability, and any other conditions that may affect the way the lathe works.
- If any part is missing, bent or broken in any way, or any electrical part does not work properly, turn the lathe off and unplug the lathe.
- Replace damaged, missing or failed parts before using the lathe again.
- Keep lathe interior free of wood chips and dust buildup around motor and switch box.

- Keep turning tools sharp. Dull or nicked tools tend to dig in the wood, causing the tool or workpiece to be thrown.
- To reduce the risk of injury from unsafe accessories, use only recommended accessories.

### Use Recommended Accessories.

- To avoid injury from unsafe accessories, use only recommended accessories.
- Consult the operator's manual for recommended accessories.
- Follow the instructions that accompany the accessories.

**⚠ WARNING:** Use only accessories recommended for this lathe. (Using other accessories may be dangerous.)

---

## To Reduce the Risk of Injury From Jams, Slips Or Thrown Pieces (Kickbacks Or Throwbacks)

When turning between centers or on the faceplate:

- Always rough-out "out of round" workpieces at slow speed.

- Running the lathe too fast, so that it vibrates, could cause the workpiece to be thrown from the lathe... or the turning tool to be jerked from your hands.

Always revolve the workpiece by hand before turning on the motor. If the workpiece strikes the tool rest, it could split and be thrown out of the lathe.

Do not allow the turning tool to "bite" into the workpiece which could result in splitting of the workpiece or the workpiece being thrown from the lathe.

- Always position the tool rest above the centerline of the lathe for spindle turning.
- Do not apply the turning tool to the workpiece below the level of the tool rest.

Do not run the lathe in the wrong direction. This could cause the turning tool to be thrown from your hands. The lathe must run in a direction so that the top of the workpiece turns toward you.

Before attaching a workpiece to the faceplate:

- Always "rough it out" to as "true

round" as possible. This will minimize vibration while turning.

- Always fasten the workpiece securely to the face-plate.
- Failure to perform these set-up operations could cause the workpiece to be thrown from the lathe.

Avoid awkward hand positions, where a sudden slip could cause a hand to move into the workpiece.

Remove all loose knots before installing workpiece between centers or on the faceplate.

Never leave the lathe work area with the power on, before the lathe has come to a complete stop, or without removing and storing the switch key.

Never operate the lathe with protective cover on the unused shaft end of the motor removed.

Hang your turning tools on the wall toward the tailstock end of the lathe. Do not lay them on the bench so that you must reach over the revolving workpiece to select them.

Keep firm hold and control of the turning tool at all times. Special caution must be exercised when knots or voids are exposed to the turning tool.

---

## Plan Ahead To Protect Your Eyes, Hands, Face and Ears

### Reduce the Risk of Accidental Starting.

- Make sure switch is "OFF" before plugging lathe into a power outlet.

### Dress for safety.

- Any power tool can throw foreign objects into the eyes. This can result in permanent eye damage. Always wear safety goggles, not glasses complying with ANSI Z87.1 (or in Canada CSA Z94.3-99) shown on package. Everyday eyeglasses have only impact resistant lenses.

They are not safety glasses. Safety goggles are available at many local retail stores. Glasses or goggles not in compliance with ANSI or CSA could seriously hurt you when they break.



- For dusty operations, wear a dust mask along with safety goggles.

## Safety Instructions For Wood Turning Lathe (continued)

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To reduce the risk of possible hearing damage, wear ear plugs or muffs when using lathe for hours at a time.

### Inspect Your Workpiece

- Think Safety.
- Complete hand sanding of the workpiece **before** removing it from the faceplate. **Never** attempt to remove and then remount a faceplate turning to the faceplate for any reason. It is not always possible to position the turning on the faceplate exactly the way it was originally and an out-of-balance condition could result.
- **Never** attempt to remount a between-centers turning if the original centers in the turning have been altered or removed. **Be positive** the lathe is set at the lowest speed if remounting a between-centers turning with non-altered original centers.
- Use extra caution in mounting a between-centers or spindle turning to the faceplate, or a faceplate turning to between-centers, for subsequent operations. **Be positive** the lathe is set at the lowest speed before turning ON.
- **Never** mount a workpiece that contains any splits, checks, or loose knots to a faceplate or between centers.
- Do not perform any operation when hand holding the workpiece. Do not mount a reamer, milling cutter, wire wheel, or a drill bit to the headstock spindle.

---

## Whenever Lathe Is Running

**⚠ WARNING:** Don't allow familiarity (gained from frequent use of your lathe) to cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

- Before actually turning with the lathe, let it run for a while. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the lathe off. Unplug the lathe. Do not restart until finding and correcting the problem.

### Keep Children Away.

- Keep all visitors a safe distance from the lathe.
- Make sure bystanders are clear of the lathe and workpiece.

### Don't Force Tool.

- Feed the tool into the workpiece only fast enough to let the tool cut without bogging down or binding.

### Before freeing jammed material.

- Turn switch "OFF".
- Wait for all moving parts to stop.
- Unplug the lathe.

### Before Leaving the Lathe

- Turn the lathe off.
- Wait for lathe to come to a complete stop.
- Unplug the lathe.
- Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

**SAVE THESE INSTRUCTIONS**

# Motor Specifications and Electrical Requirements

## Power Supply and Motor Specifications

This Lathe is designed to use a 1725 RPM motor only. Do not use any motor that runs faster than 1725 RPM.

The A-C motor used on this tool is a totally enclosed fan cooled (TEFC), induction nonreversible type, having the following specifications:

Rated H.P	1/2
Voltage	110-120
Amperes	8.0
Hertz (Cycles)	60
Phase	Single
RPM	1725
Rotation of Shaft	Clockwise

**⚠ WARNING:** To reduce the risk of electrical hazards, fire hazards or damage to the tool, use proper circuit protection. Your tool is wired at the factory for operation using the voltage shown. Connect tool to a power line with the appropriate voltage and a 15-amp branch circuit. Use a 15-amp time delay type fuse or circuit breaker. To reduce the risk of shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

## General Electrical Connections

**⚠ DANGER:** To reduce the risk of electrocution:

1. Use only identical replacement parts when servicing. Servicing should be performed by a qualified service technician.
2. Do not use in rain or where floor is wet.

This tool is intended for indoor residential use only.

**⚠ WARNING:** To prevent electric shock, do not permit fingers to touch the terminals of plug when installing or removing the plug to or from the outlet.

## 110-120 Volt, 60 Hz. Tool Information

**NOTE:** The plug supplied on your tool may not fit into the outlet you are planning to use. Your local electrical code may require slightly different power cord plug connections. If these differences exist refer to and make the proper adjustments per your local code before your tool is plugged in and turned on.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce

the risk of electric shock. This tool is equipped with an electric cord having an equipment grounding conductor and a grounding plug, as shown. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

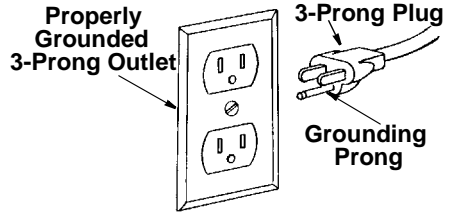
## Motor Specifications and Electrical Requirements (continued)

Improper connection of the equipment grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

If the grounding instructions are not completely understood, or if you are in doubt as to whether the tool is properly grounded check with a qualified electrician or service personnel.

### Motor Safety Protection

1. Connect this tool to a power source with the appropriate voltage for your model and a 15-amp branch circuit with a 15-amp time delay fuse or circuit breaker. Using the wrong size fuse can damage the motor.
2. If the motor won't start, turn the switch off immediately and unplug the tool. Check the spindle to make sure it turns freely. If the spindle will not turn make sure the index pin is disengaged. (See "Getting to Know Your Wood Lathe" - Index Pin.) If the spindle is free, try to start the motor again. If the motor still does not start, refer to the "Motor Troubleshooting Chart."
3. Fuses may "blow" or circuit breakers may trip frequently if:
  - a. **Motor Is Overloaded**-Overloading can occur if you feed too rapidly or



**⚠ WARNING:** If not properly grounded, this tool can cause an electrical shock, particularly when used in damp locations, in proximity to plumbing, or out of doors. If an electrical shock occurs there is the potential of a secondary hazard, such as your hands to hit the cutting tool.

- a. make too many start/stops in a short time.
  - b. Line voltages should not be more than 10% above or below the nameplate voltage. For heavy loads, however, the voltage at motor terminals must equal the voltage specified for your model.
4. Most motor troubles may be traced to loose or incorrect connections, overload, low voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor doesn't work well. Check wire sizes and length with the Wire Size Chart shown.

### ⚠ WARNING:



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.



Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.




## Wire Sizes

**NOTE:** Make sure the proper extension cord is used and is in good condition.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3 wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tool's plug.

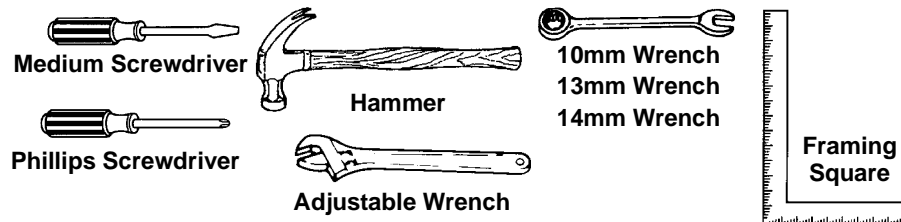
Extension Cord Length	Gauge (A.W.G)
0-25 Ft.	16
26-50 Ft.	14

## Check Motor Rotation

Place the motor on your workbench or on the floor. Standing clear of the motor shaft, plug the motor cord into a properly grounded outlet. Notice the rotation of the shaft. As you look directly at the motor shaft it should be turning in the clockwise direction.  If the motor shaft is turning clockwise, remove the plug from the power outlet and continue the assembly procedures. If the motor is turning counterclockwise, remove the plug from the power outlet and contact 1-866-539-1710.

## Unpacking and Checking Contents

### Tools Needed



### Unpacking

**⚠ WARNING:** To reduce the risk of injury from unexpected starting or electrical shock, do not plug the power cord into a source of power. This cord must remain unplugged whenever you are working on the wood lathe.

1. Unpack all the parts of your wood lathe and lay them out in your work area so they can be recognized easily. Check all parts with the parts table and be careful not to lose any parts during assembly.

**NOTE:** Make certain all items are accounted for, before discarding any packing material.

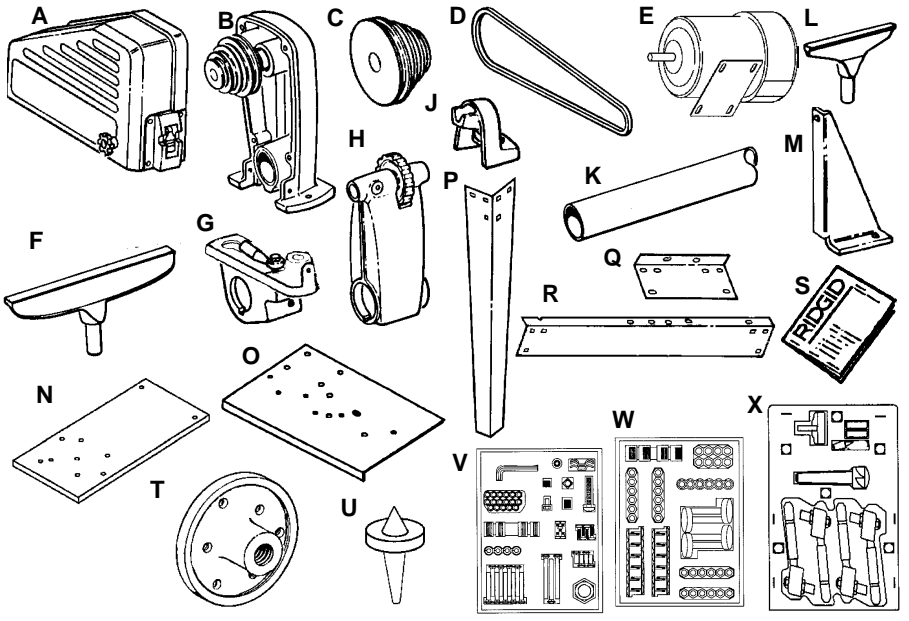
## Unpacking and Checking Contents (continued)

### List of Loose Parts

Item	Description	Qty.	
A	Belt Guard Assembly.....	1	K Tube Or Bed.....
B	Headstock .....	1	L Small Tool Rest .....
C	Motor Pulley .....	1	M Bracket Plate.....
D	V-Belt.....	1	N Particle Board Table Top .....
E	Motor .....	1	O Plate-Support (Steel).....
F	Large Tool Rest .....	1	P Leg .....
G	Tool Rest Holder/Clamp Support Assembly.....	1	Q End Stiffener .....
H	Tailstock and Ram .....	1	R Side Stiffener.....
J	Rear Foot .....	1	S Operator's Manual .....
			T 6" Face Plate.....
			U Live Center.....

Item	Description	Qty.
V	Loose Parts Package (Containing the following items):	
	Bolt, Carriage M6 x 1.0-45 .....	9
	Bolt, Carriage M6 x 1.0-65 .....	3
	Bolt, Carriage M6 x 1.0-16 .....	4
	Lockwasher, Ext. 5mm .....	4
	Lockwasher, 6mm .....	17
	Nut, Hex M6 x 1.0.....	17
	Nut, Sq. M8 x 1.25.....	1
	Nut, Hex Heavy 3/4-16 .....	1
	Screw, Pan Hd. M8 x 1.25-45.....	1
	Screw, Pan Hd. M5 x 0.8-12.....	4
	Screw, Hex Head M10 x 1.5-30.....	1
	Washer, 6.5 x 19 x 1.6.....	17
	Wrench, Hex "L" 4mm .....	1
	Screw Soc. Set M8 x 1.25-8.....	1
	Screw, Pan Head M4 x 0.7-6.....	5

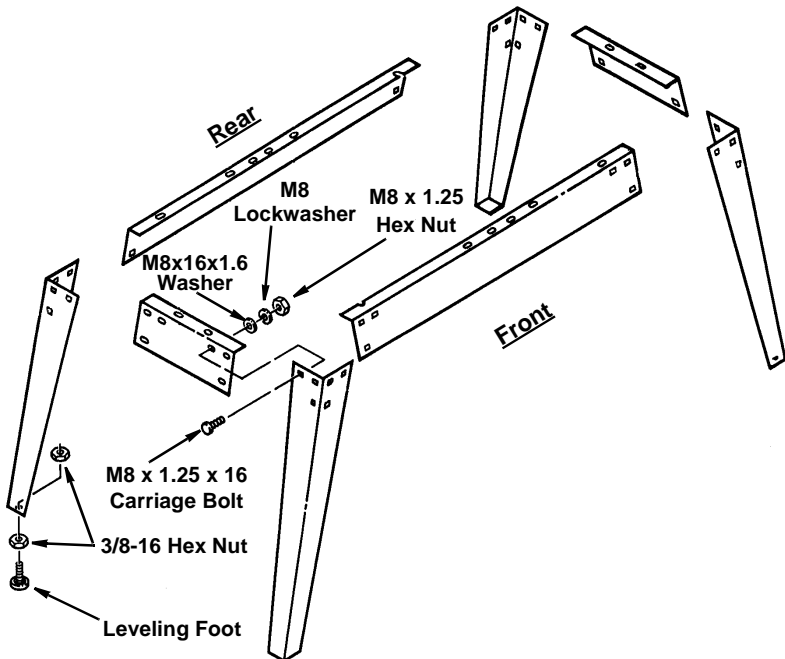
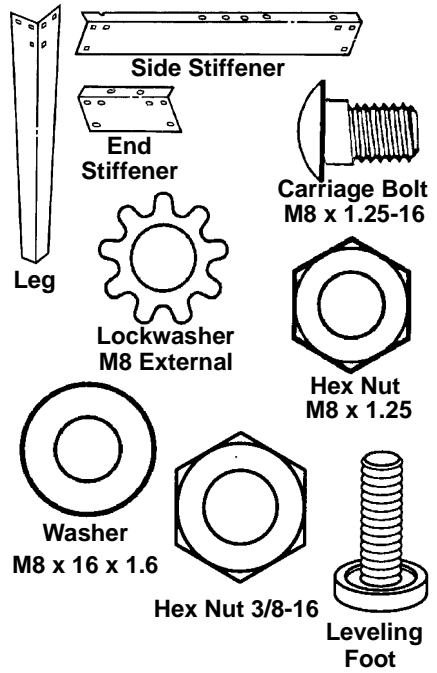
	Screw, Hex Head M6 x 1.0-12 .....	1
	Cord Clamp .....	2
W	Loose Parts Package (Containing the following items):	
	Bolt, Carriage M8 x 1.25-16 .....	24
	Nut, Hex M8 x 1.25 .....	24
	Washer M8 x 16 x 1.6 .....	24
	Lockwasher, 8mm .....	24
	Foot Leveling 3/8" .....	4
	Nut Hex Jam 3/8-16 .....	8
X	Loose Parts Package (Containing the following items):	
	Spur Center .....	1
	Point Center .....	1
	Switch Key .....	1
	Lever, Assembly.....	4
	Shoe, Lock.....	2



# Assembly

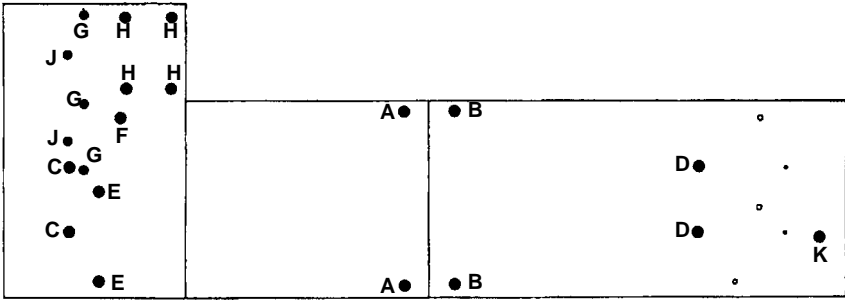
## Assembling Steel Legset

1. Find the following legset pieces:
  - 4 Legs
  - 2 Side Stiffeners
  - 2 End Stiffeners
2. From the loose parts package find the following items:
  - 24 Carriage Bolts M8 x 1.25-16
  - 24 Lockwashers M8 External Type
  - 24 Hex Nuts, M8 x 1.25
  - 24 Washer M8 x 16 x 1.6
  - 8 Hex Nuts, 3/8-16
  - 4 Leveling feet
3. Assemble the legset as shown. The legs must be assembled on the outside of stiffeners and the side stiffener on top of the end stiffeners. Insert the truss head screws through the holes in the legs, then through the holes in the side or end stiffeners.
4. Install washer and lockwasher. Screw on the nuts finger tight.
5. Install leveling feet as shown:



## Assembly (continued)

### Holes Used for Mounting Boards and Wood Lathe to Leg Set



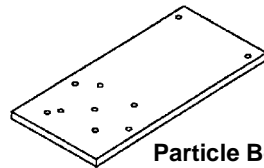
- A - Board/Side Support
- B - Board/Side Support
- C - Plate Support/Board/End Support
- D - Board/End Support
- E - Headstock/Plate Support/Board

- F - Bracket Plate/Plate Support/Board/Side Support
- G - Belt Guard/Plate Support
- H - Motor/Plate Support
- J - Cord Clamps/Plate Support
- K - Rear Foot/Board

### Mounting Left Side Table Top

1. Find the following:
  - 1 Particle Board Table Top
  - 1 Plate Support (Steel)
2. From the loose parts package find the following:
  - 4 M6 x 1.0-45 Carriage Bolts
  - 4 M6 x 1.0 Hex Head Nuts
  - 4 6.5 x 19 x 1.6 Flat Washers
  - 4 6mm Lockwashers
3. Position the table top on the left side of the assembled legset as shown
4. Front Side Stiffeners

- through the two holes marked C on the table top
- and through the holes marked C in the End Stiffener. Place a washer, lockwasher and nut on these bolts. Finger tighten only.



Particle Board Table Top

Face the front of the legset and count over from the left one slot and one hole. Place a carriage bolt through the table top (hole A) and the side stiffener. Fasten in place with a washer, lockwasher and nut. Finger tighten only.

#### 5. Rear Side Stiffener

Face the rear of the legset and count over from the right two holes. Place a carriage bolt through the table top (hole A) and the side stiffener. Fasten in place with a washer, lockwasher and nut. Finger tighten only.

6. Locate the two holes marked C in the steel plate support. Place bolts;
  - through these holes

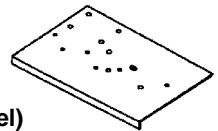
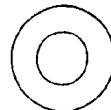


Plate Support (Steel)



Carriage Bolt  
M6 x 1.0-45



Flat Washer  
6.5 x 19 x 1.6



Lockwasher  
6mm

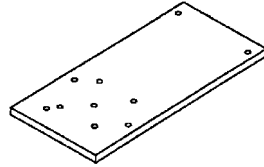


Nut Hex  
M6 x 1.0

## Mounting Right Side Table Top

1. Find the following:
  - 1 Particle Board Table Top
2. From the loose parts package find the following:
  - 4 M6 x 1.0-45 Carriage Bolts
  - 4 M6 x 1.0 Hex Head Nuts
  - 4 6.5 x 19 x 1.6 Flat Washers
  - 4 6mm Lockwashers
3. The right side mounts similar to the left **except** there is no steel support plate.
4. Place carriage bolts, through the table top holes B and D as shown. Align the right side table top with the left side table top so that the two halves join end to end. Fasten in place with a washer, lockwasher and nut.
5. Securely tighten all nuts and bolts.
6. Adjust leveling feet as follows:
  - a. Move legset to desired location.
  - b. With a 14mm wrench loosen bottom nut.
  - c. Back off top nut by hand.
  - d. Raise or lower foot by adjusting bot-

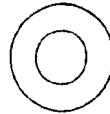
- e. Snug top nut against inside of leg by hand.
- f. Tighten all four bottom nuts using 14mm wrench.



**Particle Board Table Top**



**Carriage Bolt  
M6 x 1.0-45**



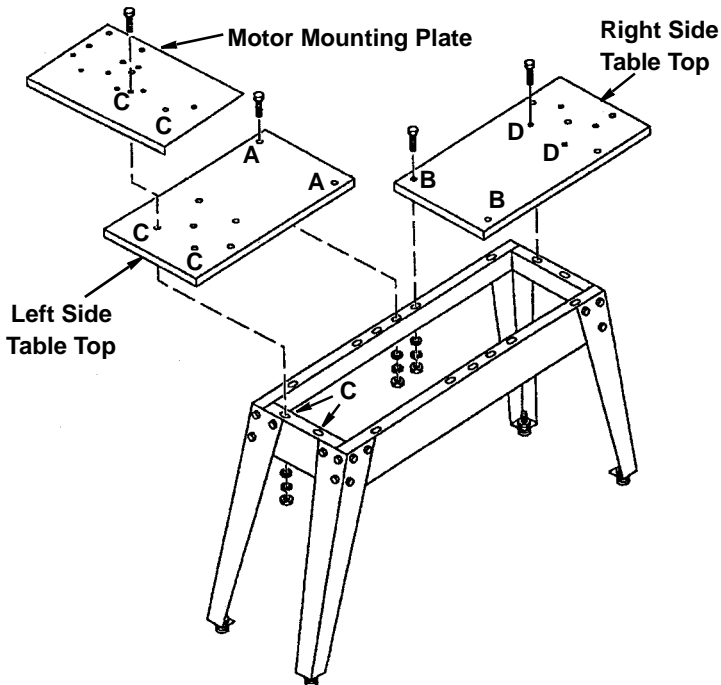
**Flat Washer  
6.5 x 19 x 1.6**



**Lockwasher  
6mm**



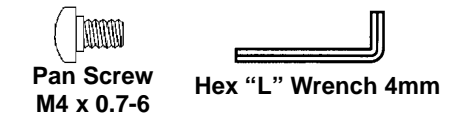
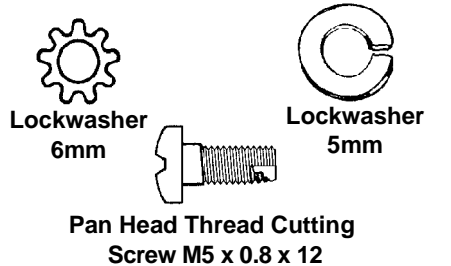
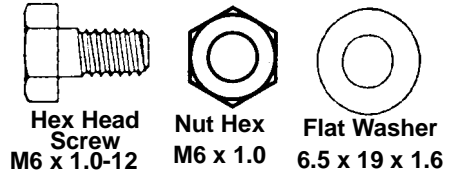
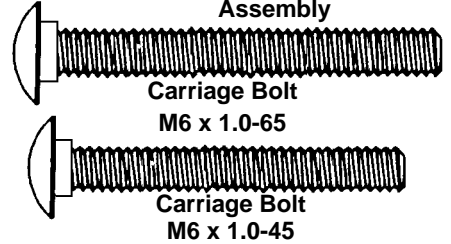
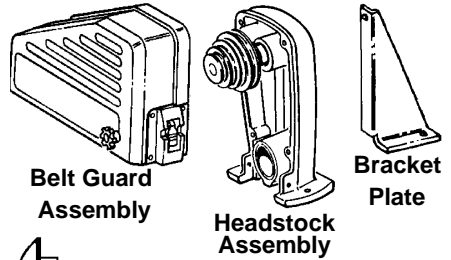
**Nut Hex  
M6 x 1.0**



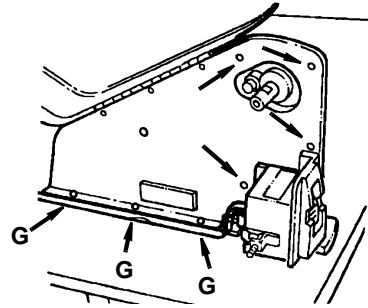
## Assembly (continued)

### Mounting Headstock

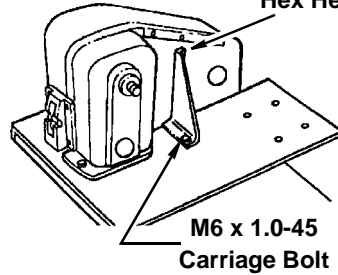
- Find the following:
  - 1 Belt Guard Assembly
  - 1 Headstock Assembly
  - 1 Plate Bracket
- From the loose parts package find the following:
  - 2 M6 x 1.0-65 Carriage Bolts
  - 1 M6 x 1.0-45 Carriage Bolt
  - 1 M6 x 1.0-12 Hex Head Screw
  - 4 M6 x 1.0 Hex Nuts
  - 4 6.5 x 19 x 1.6 Flat Washers
  - 4 6mm Lockwashers
  - 4 M5 x 0.8-12 Pan Head Screws
  - 4 5mm Lockwasher
  - 3 M4 x 0.7-6 Screw
  - 1 Hex "L" Wrench 4mm
- Remove the headstock pulley using the 4mm hex "L" wrench.
- Find four pan head thread cutting screws and four lockwashers from among the loose parts. Attach the belt guard to the headstock assembly with these screws and lockwashers. The arrows in this illustration show the location of the screws.
- Locate the two holes on the left table top Labeled E (from page 12). Position the headstock assembly so the mounting holes line-up with the holes in the table board. Place a M6 x 1.0-65 carriage bolt, through these holes. Fasten in place with a washer, lockwasher and nut.
- Place the bracket plate next to the headstock as shown. Attach the bracket plate to the back of the belt guard assembly with a M6 x 1.0-12 screw, washer, lockwasher and nut.



7. Locate Hole F on the left table board. Attach the bracket plate to the table top through Hole F. Use an M6 x 1.0-45 carriage bolt, washer, lockwasher and nut. Finger tighten.
8. Locate the three holes Labeled G on the lower edge of the belt guard plate. Place a M4 x 0.7-6 screw through each of these holes and into the tapped holes in the plate support.
9. Replace pulley on headstock tightening with 4mm hex "L" wrench.
10. Securely tighten all nuts and bolts.



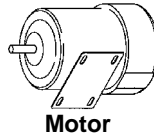
M6 x 1.0-12  
Hex Head Screw



M6 x 1.0-45  
Carriage Bolt

## Mounting the Motor

1. Find the following:
  - 1 Motor
  - 1 Motor Pulley
  - 2 Cord Clamps
  - 1 V-Belt
2. From the loose parts package find the following:
  - 2 M4 x 0.7-6 Pan Head Screws
  - 4 M6 x 1.0-16 Carriage Bolts
  - 4 6.5 x 19 x 1.6 Flat Washers
  - 4 6mm Lockwashers
  - 4 M6 x 1.0 Hex Nuts
  - 1 M8 x 1.25-8 Socket Set Screw
  - 1 4mm Hex "L" Wrench



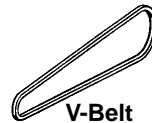
Motor



Cord Clamp



Motor Pulley



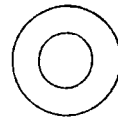
V-Belt



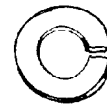
Pan Screw  
M4 x 0.7-6



Carriage Bolt  
M6 x 1.0-16



Washer  
6.5 x 19 x 1.6



Lockwasher  
6mm



Hex Nut  
M6 x 1.0



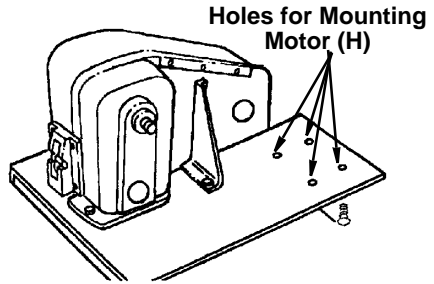
Socket Set Screw  
M8 x 1.25-8



4mm Hex "L"  
Wrench

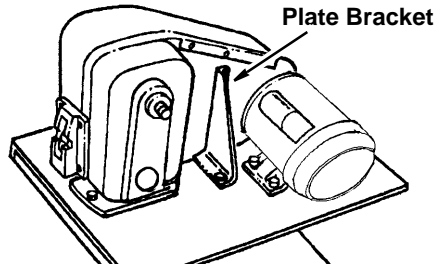
## Assembly (continued)

3. Locate the four holes Labeled H on the plate support.
4. Place the motor over these holes with the motor shaft extending through the belt guard plate. Secure in place with carriage bolts, washers, lockwashers and nuts.
5. Plug motor cord into outlet on back of switch box. Do Not plug motor cord into power source outlet.
6. Route the motor cord and power cord along side the headstock as shown.

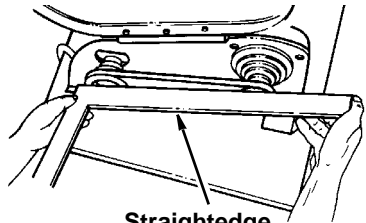


Install Carriage Bolts from the Bottom Up

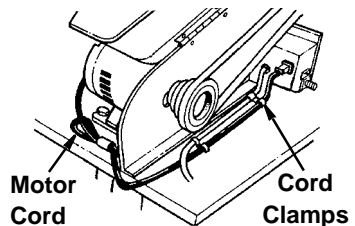
6. Secure the motor cord and power cord with two cord clamps and an M4 x 0.7-6 pan head screw into the tapped holes Labeled J in the motor mounting plate.
7. Place the motor pulley on the motor shaft so that the small diameter is approximately 1/16" away from the motor. Tighten the setscrew with the 4mm Hex "L" wrench securely against the flat spot on the motor shaft.



8. Place the belt on the pulleys and slide the motor toward the rear of workbench until all the slack is removed from the belt. Tighten only two of the motor mounting bolts at this time.



- NOTE:** 1/2 inch deflection of belt under moderate pressure applied between the two pulleys is adequate tension.
9. Place a straightedge such as a piece of wood, metal or framing square across the pulleys to see if they are in line with each other. If they are, tighten the other two motor mounting bolts. If they are not in line, loosen the two motor bolts and move the motor sideways until pulleys are in line. Tighten the bolts.



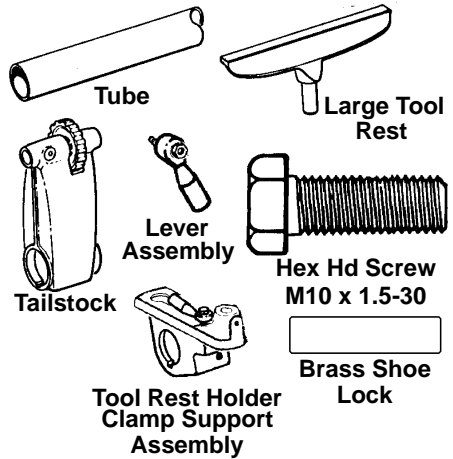
**NOTE:** Changing speeds is accomplished by repositioning the V-Belt on the pulleys (see Changing Speeds" section). There needs to be sufficient slack in the V-belt to allow for this.



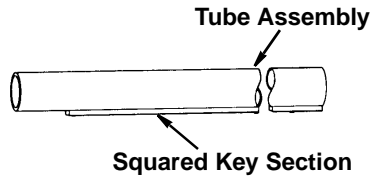
## Headstock, Tailstock, and Tool Rest Assembly

1. Find the following:

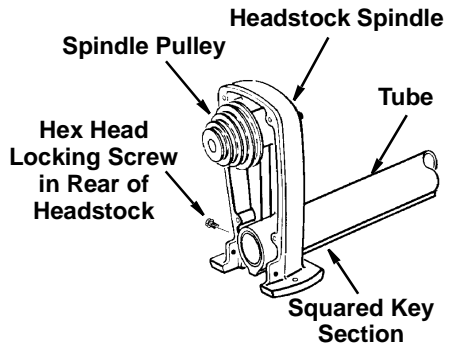
- 1 Tube
- 1 Large Tool Rest
- 1 Tailstock
- 2 Lever Assembly
- 1 Hex Head Screw M10 x 1.5-30
- 1 Tool Rest Holder/Clamp Support Assembly
- 2 Brass Shoe Locks



2. Place the tube assembly on your workbench as shown. Always keep the squared key section straight down.

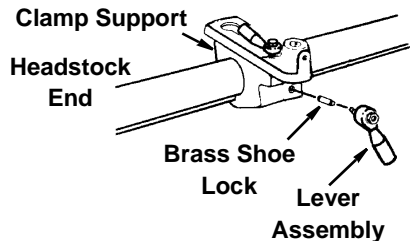


3. Slide the tube into the headstock until it stops against the squared key section. Insert hex head screw and tighten securely.



4. Slide the tool rest holder/clamp support assembly onto the middle of the tube. Assemble lever assembly as shown.

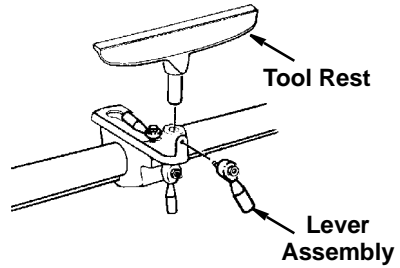
**NOTE:** Make sure to insert brass shoe lock before installing lever assembly.



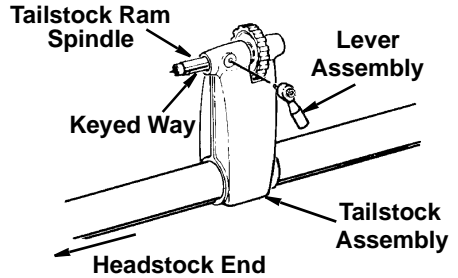
## Assembly (continued)

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5. Set large tool rest in tool rest holder and install lever assembly as shown.

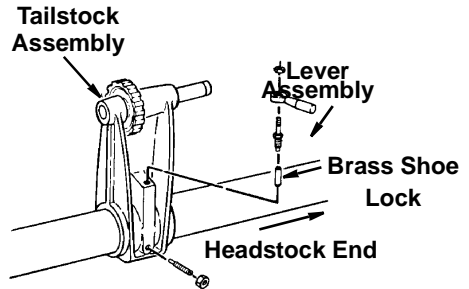


6. Slide tailstock assembly onto the tube and install tailstock ram spindle lock lever. Be sure that the stud nut engages the keyed way of the spindle.



7. On the backside of the tailstock, assemble the locking devices as shown.

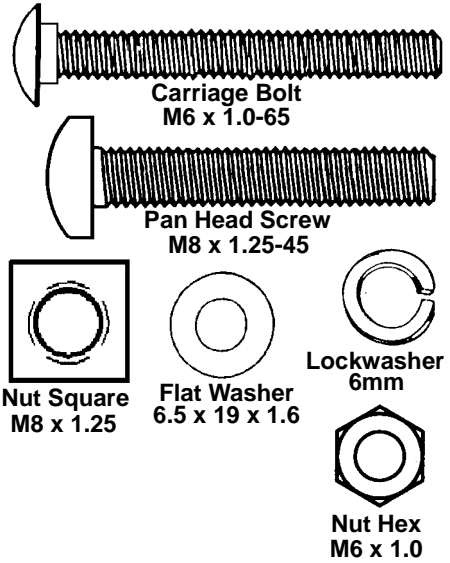
**NOTE:** Make sure to insert brass shoe lock before installing lever assembly.



## Mounting Rear Foot

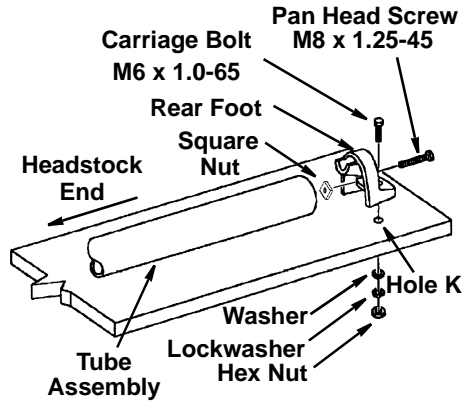
1. Locate the following:

- 1 M8 x 1.25-45 Pan Head Screw
- 1 M8 x 1.25 Square Nut
- 1 M6 x 1.0-65 Carriage Bolt
- 1 6.5 x 19 x 1.6 Flat Washer
- 1 6mm Lockwasher
- 1 M6 x 1.0 Hex Nut



2. Install the rear foot onto the tube as shown and tighten rear foot locking screw. One corner of the nut will rest in the trough on the foot, the opposite corner of the nut will rest against the wall of the tube. Foot will wedge into place as screw is tightened. This may take several attempts.

3. Attach the rear foot on the right side table board, hole labeled K. Secure in place with bolt, washer, lockwasher and nut as shown.

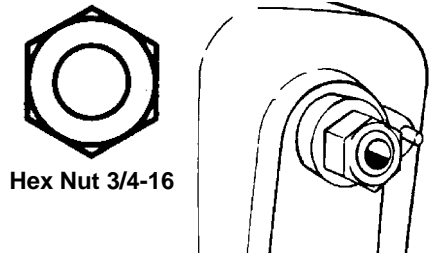


## Assembly (continued)

### Spur and Cup Center Installation

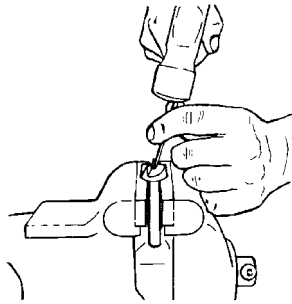
1. From the loose parts package find the following:

- 1 3/4-16 Hex Nut
- 1 Spur Center
- 1 Live Center



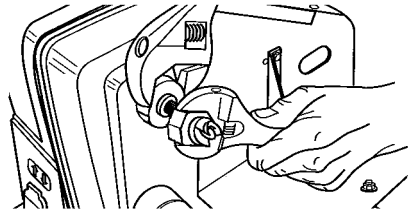
2. Screw nut onto head stock spindle until finger tight.

3. To insert point into spur center, place center between jaws of a vise. Do not tighten vise. Insert point into center and with a hammer and nail gently tap around the base of the point until secure.



**NOTE:** A piece of cloth may be wrapped around the centers to protect them before inserting into a vise.

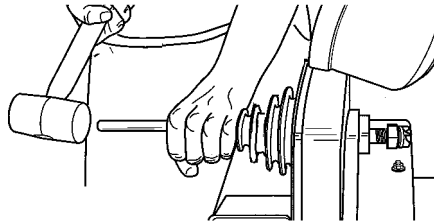
Place the wood between the centers and lock the tailstock.



4. Use a clean cloth to remove any oil or other debris from the taper of each center and the inside bore on both headstock spindle and tailstock ram.

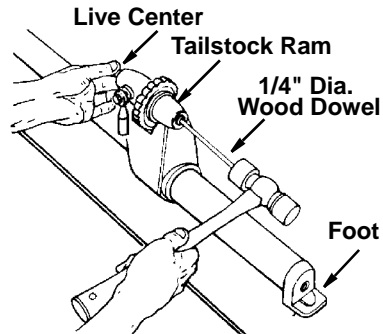
5. Insert spur center into head stock spindle and live center into tailstock ram.

**NOTE:** Do not drive or hammer centers into spindle or ram as removal may be difficult.



6. To remove spur center from spindle, place a wrench on the "flats" of the spindle and turn hex nut counterclockwise until center is ejected. Do not use index pin to hold pulley.

The spur center may also be removed with a 3/8" dia. wood dowel or brass rod through the hole in the spindle of headstock. Hold the center with one hand and tap the dowel or rod with a hammer.



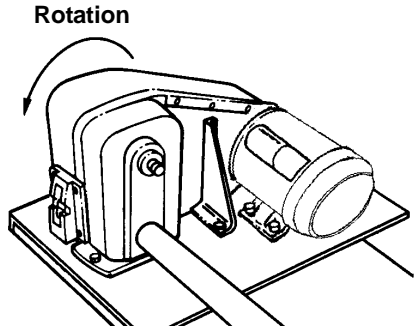
7. To remove live center insert a 3/8" dia. wood dowel or brass rod through the hole in the tailstock ram. Hold the center with one hand and tap the dowel or rod with a hammer.

## Check Spindle Rotation

The lathe spindle must rotate counterclockwise when viewed from the spindle end.

**NOTE:** Make sure the spur center is removed from the spindle.

1. Plug the lathe power cord into a properly grounded outlet (See page 7)
2. Stand clear of the lathe spindle and turn the switch **On**. Notice the rotation of the spindle. If it is **Not** turning **Counterclockwise** contact your Authorized Service Center immediately before using this tool.

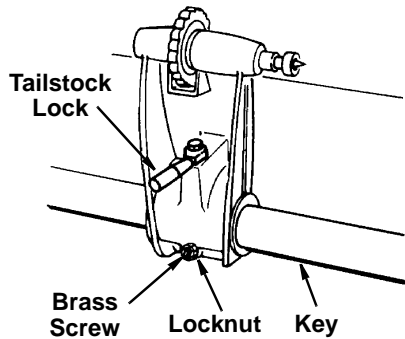


## Adjusting Tailstock

The tailstock contains a brass screw which bears against the "key" on the underside of the bed. This screw prevents excessive "looseness" (rocking back and forth) of the tailstock.

1. Loosen the locknut using a 13mm wrench.
2. Tighten the screw moderately against the key, then loosen it about 1/4 turn.

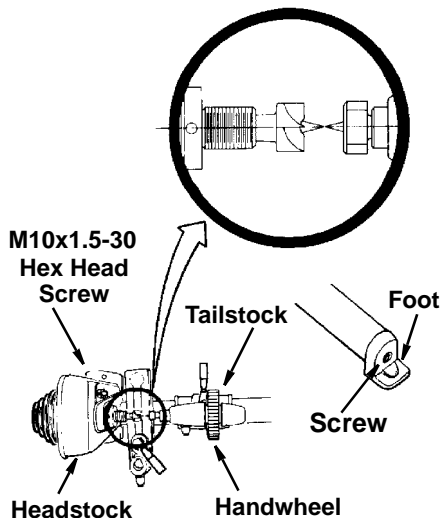
Slide the tailstock along the bed. If it does not stick or bind in any one spot, tighten the nut. If it binds or sticks, loosen the screw only enough so that the tailstock slides smoothly along the bed.



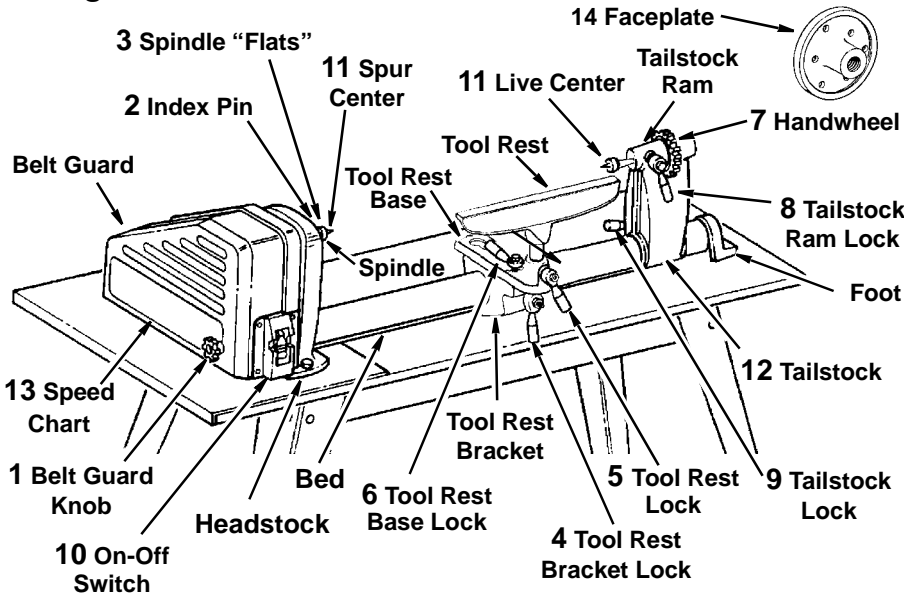
## Aligning Centers

If the centers are not in line as shown, make the following adjustments.

1. Make sure the tailstock and ram are locked when checking for alignment.
2. Loosen the screw in the foot... **Tap** the screw to loosen the locknut inside.
3. Using a wrench, loosen the hex head screw on the back of the headstock. The screw is located about 1-3/4" from the bottom.
4. Swing the tailstock so that the two points are in line... securely tighten the hex head screw in the headstock and the screw in the end of the foot.



# Getting To Know Your Wood Lathe



- 1. Belt Guard Knob...** Locks the hinged part of the guard during operation.
- 2. Index Pin...** Engages with the spindle pulley to determine equal spacing for cuts for fluting or reeding, or for dividing face plate work. Do Not Use For Removing Faceplates.
- 3. Spindle "Flats"...** Place a wrench on these "flats" to remove faceplate or sanding discs.
- 4. Tool Rest Bracket Lock...** Clamps the tool rest bracket to the bed.
- 5. Tool Rest Lock...** Clamps the tool rest to the tool rest base.
- 6. Tool Rest Base Lock...** Clamps the tool rest base to the tool rest bracket.
- 7. Handwheel...** Adjusts the tailstock ram.
- 8. Tailstock Ram Lock...** Clamps the ram in the tailstock.
- 9. Tailstock Lock...** Clamps the tailstock to the bed.
- 10. On-off Switch**
- 11. Spur Center and Live Center...** are used for spindle turning and should always be in alignment.
- 12. Tailstock...** supports the workpiece for spindle turning.
- 13. Speed Chart...** indicates general recommended speeds for various sizes of workpieces.
- 14. Faceplate...** The workpiece is secured to the faceplate and then screwed onto the spindle. Used to turn bowls, plates and other objects.

## On-off Switch

**⚠ WARNING:** To prevent serious personal injury, do not connect power cord to electrical outlet in your shop until you are sure that motor rotation is correct (see page 9).

The On-Off Switch has a locking feature. **This Feature Is Intended To Prevent Unauthorized And Possible Hazardous Use By Children And Others.**

1. Insert key into switch.

**NOTE:** Key is made of yellow plastic.

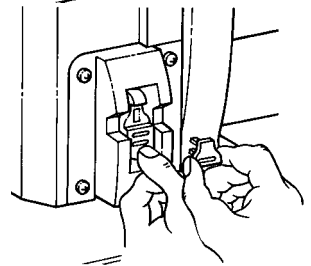
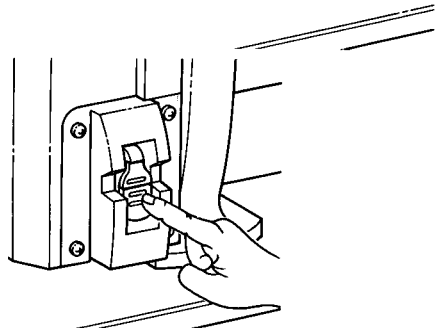
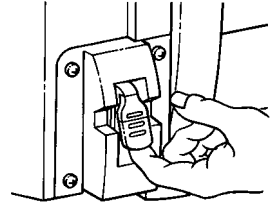
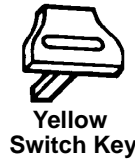
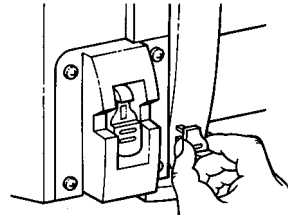
2. To turn lathe **On...** Insert finger under switch lever and pull **End** of switch out.

3. To turn lathe **Off...** Push lever in.

**Never** leave the lathe unattended until it has come to a complete stop and you have removed the switch key.

Do not cycle the motor switch on and off rapidly, as this may cause the faceplate or sanding disc to loosen. In the event this should ever occur, stand clear of the face plate or sanding disc until it has come to a complete stop... retighten it.

4. To lock switch in **Off** position... **Hold** switch **In** with one hand, **Remove** key with other hand.



**⚠ WARNING:** To prevent unauthorized use, always lock the switch "OFF". When lathe is not in use... remove key and keep it in a safe place.

**⚠ WARNING:** In the event of a power failure (all of your lights go out) turn switch off... lock it and remove the key. This will prevent the risk of injury from the lathe starting up again when the power comes back on.

**Speed Chart (Illustration for reference only.) See chart on belt guard assembly.**

**⚠ WARNING:** Always use lowest speed when starting a new workpiece, using faceplate, or turning between centers to avoid possible injury.

SPINDLE SPEED VELOCIDAD DEL MUELLO / VITESSE D'ARRÊE		RECOMMENDED GENERAL SPEEDS VELOCIDADES GENERALES RECOMENDADAS / RECOMMENDED GENERAL SPEEDS									
875	2250	<b>SPINDLE TURNING</b> TORNEADO CON MUELLO TOURAGE SUR AXE	1 1/2"	12"	1350	3450	<b>FACE TURNING</b> TORNEADO CON PLATO LISO TOURAGE SUR LE PLATEAU	1 1/2"	4" MAX	875	1350
1350	3450		2"	16"	875	2250		1 1/2"	4" MAX	1350	2250
			3"	21"	875	2250		2"	4" MAX	1350	2250
			4"	36"	875	2250		3"	4" MAX	2250	3450

# Basic Lathe Operations

**⚠ WARNING:** For your own safety, turn switch "OFF" and remove plug from power source outlet before making any adjustments.

## Changing Speeds

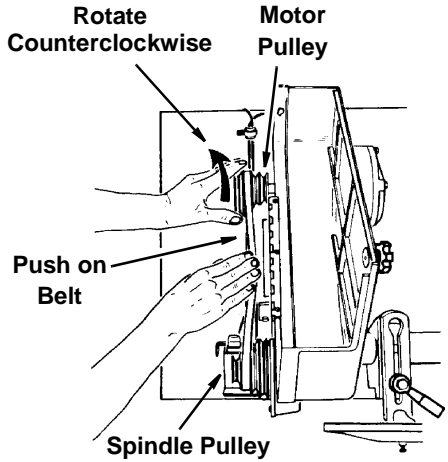
The belt is shown positioned on the second steps from the outside end of the pulleys. This causes the lathe to run 2250 R.P.M.

Suppose you wish to run the lathe slower - say, 1350 R.P.M. You must shift the belt inward.

1. Make sure the power cord is removed from the outlet.
2. With the belt guard raised, rotate the motor pulley **Counterclockwise** with your left hand while pushing on the belt with your right hand.
3. Continue to rotate the pulley while pushing on the belt until it "climbs" down into the third step of the motor pulley.
4. Now rotate the spindle pulley **Clockwise** with your right hand while pushing on the belt with your left hand. The belt will climb up into the third step of the spindle pulley.

To make the lathe go faster, the belt must be shifted outward.

1. Rotate the spindle pulley **Clockwise** with your right hand. Pull on the belt while rotating the pulley until it climbs down into the next smaller step.
2. Now rotate the motor pulley **Counterclockwise** with your left hand while pulling on the belt with your right hand. The belt will climb up into the next larger step.





## Spindle Turning

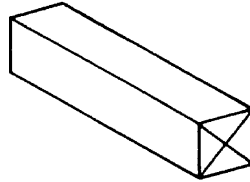
**⚠ WARNING:** For your own safety, turn switch "OFF" and remove switch key before mounting work-piece in lathe.

If you have never done any amount of wood turning, we suggest that you practice using the various wood turning tools. Start with a small spindle turning.

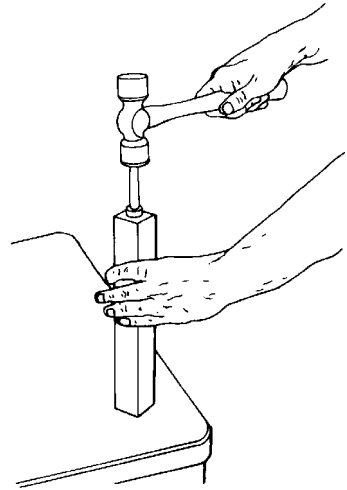
Be sure to study the "**How To...**" section of this manual. It explains and illustrates the correct use of the turning stools, the positioning of the tool rest and other information to help you gain experience.

1. Carefully inspect and select a piece of wood 2" x 2" x 12" and always use wood free of checks, splits, cracks or knots.
2. Draw diagonal lines on each end to locate the centers.
3. On one end, make a sawcut approximately 1/16" deep on each diagonal line. This is for the spur center.
4. The other end is for the live center. Place the point of an awl on the wood where the diagonal lines cross and mark the center point.
5. Tap the spur center into the other end of the wood. Make sure the spurs are in the saw cuts. Remove the spur center.
6. Make sure the centers and the hole in the spindle and the tailstock ram are clean. Insert the spur center into the headstock and the live center into the tailstock. Do not drive them in.
7. Place the wood between the centers and lock the tailstock.

**⚠ WARNING:** Be sure the spur center and live center are firmly seated against the workpiece and that the tailstock is securely locked in place to prevent serious personal injury.



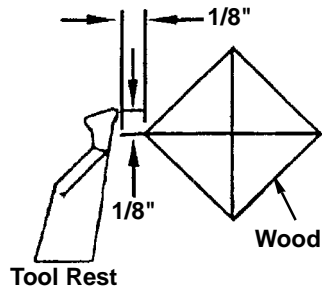
**Diagonal Lines  
on Both Ends**



## Basic Lathe Operations (continued)

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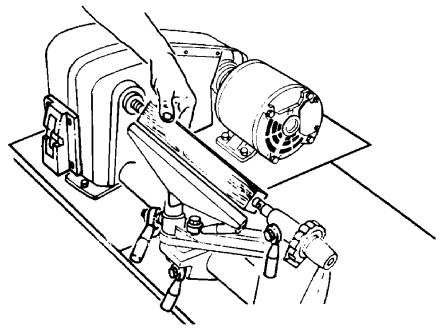
8. Move the live center into the wood by turning the hand wheel. Make sure that the live center and spur center are "seated" into the wood in the holes made in steps 4 and 5 on previous page. Tighten tailstock ram lock.
9. Adjust the tool rest approximately 1/8" away from the corners of the wood and 1/8" above the center line. Note the angled position of the tool rest base.



**⚠ WARNING:** For your own safety, after adjusting the tool rest be sure and lock the tool rest base and the tool rest.

Look at the speed chart. Notice that a 2" square turning up to 18" long should run at 875 R.P.M. for "roughing". Move the V-belt on the pulleys to the slowest speed as outlined under "Changing Speeds" section.

**⚠ WARNING:** For your own safety rotate the wood by hand to make sure that the corners do not strike the tool rest or anything else before turning the lathe "ON". Always be sure the workpiece is properly mounted and the lathe is set at the proper speed (RPM).

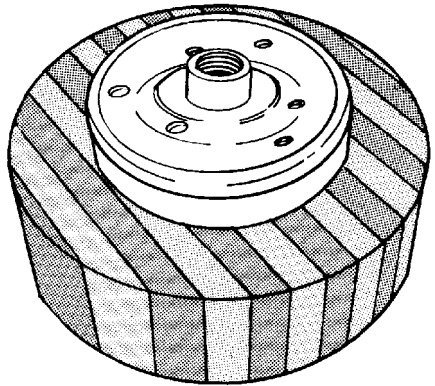
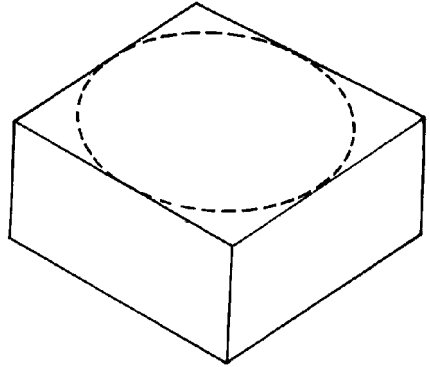


## Faceplate Turning

**⚠ WARNING:** For your own safety, turn switch “OFF” and remove switch key before mounting work-piece in lathe.

Before installing or using the faceplate or bowl turning tool rest, read and follow the safety and operating instructions contained in the operator’s manual furnished with your wood turning lathe.

1. Do not use wood that is checked, split or contains a knot because it could come apart while turning and cause an injury.
2. If the workpiece is glued together (laminated) make sure that you follow recognized gluing procedures in making the joints so that they are sound, otherwise the workpiece could come apart and cause an injury.
3. Make sure that the surface of the workpiece to which the faceplate is attached, is as flat as the faceplate. Otherwise the workpiece could change position while turning and cause excessive vibration. The workpiece can be trued up (made flat) by hand planeing or using a belt sander.
4. Before attaching a workpiece to the faceplate, always cut it as “true round” as possible, on the band saw, or cut off the corners. This will minimize vibration while rough turning.
5. To install faceplate on wood lathe **remove** the 3/4"-16 hex nut from the lathe spindle **before** mounting faceplate to the lathe spindle. This is necessary in order to provide full thread engagement of faceplate to spindle. Put a small amount of grease on the spindle, this will make removal of the faceplate easier.



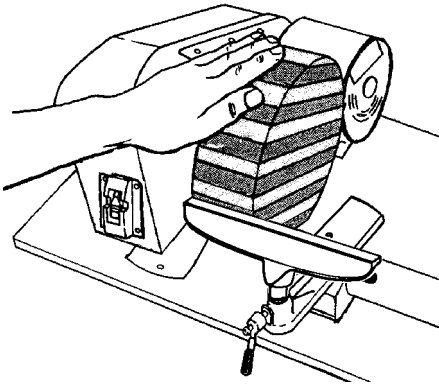
## Basic Lathe Operations (continued)

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6. Use the faceplate (6-inch) for turnings 8 to 12 inches in diameter and 4 inches thick. Attach to workpiece using 6 #14 flathead woodscrews, not less than 1 inch long.

**IMPORTANT:** Do not use smaller size screws or sheet rock screws as they are too brittle and could break, causing the workpiece to come loose and possibly causing injury.

7. Always rotate the workpiece by hand before turning on the motor to make sure that it does not strike the tool rest, or any other part of the lathe.



8. Before turning on the motor, check the belt. Make sure it is positioned to run the lathe at the slowest speed. Refer to your operator's manual for

instructions on making this adjustment.

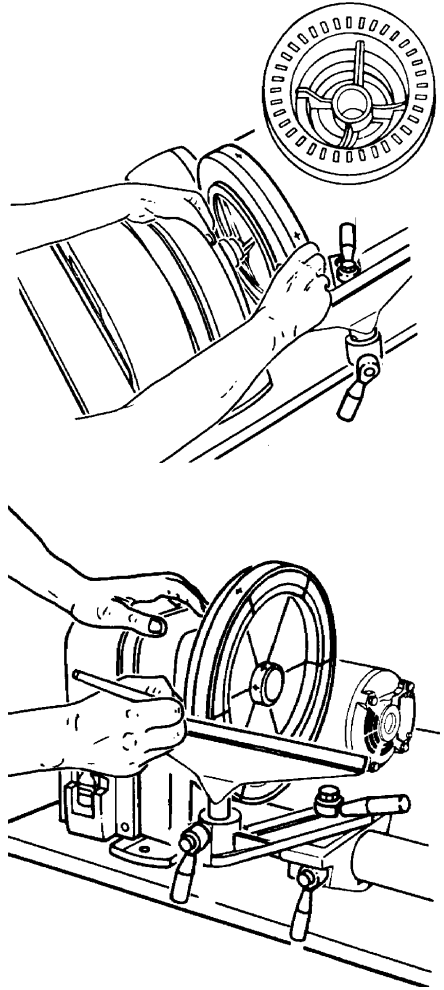
9. Stand to left of the workpiece with access to switch when turning the motor "on". If the workpiece is loose or if there is excessive vibration, **turn the motor off immediately** and determine and correct the cause.
10. Set speed as indicated by speed chart found on lathe and in operator's manual, for roughing or finish turning as applicable.
11. Complete hand sanding of the workpiece **before** removing it from the faceplate. **Never** attempt to remove and then remount a faceplate turning to the faceplate for any reason. It is not always possible to position the turning on the faceplate exactly the way it was originally and an out-of-balance condition could result.
12. When removing the faceplate from the spindle **do not engage the index pin** to hold the spindle, because it could break. Position a wrench on the "flats" of the spindle. Rotate the faceplate counterclockwise to remove faceplate.

## Indexing

The spindle pulley contains 36 equally spaced holes. The index pin engages with these holes to keep the spindle from turning while you put a mark on the workpiece.

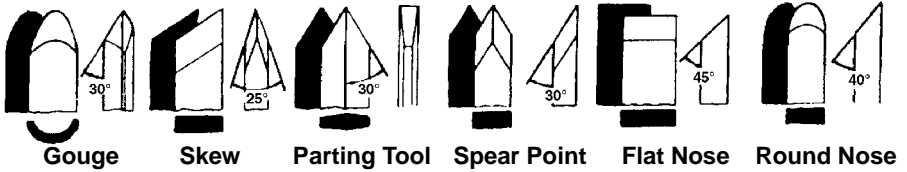
For example: To locate the position of six spokes in a wheel:

1. Pull the index pin outward and turn it so that the small cross pin slips into the slot. This will allow the index pin to engage in one of the holes in the pulley and prevent the spindle from turning.
2. Adjust the tool rest approximately at the centerline and make a mark.
3. Pull out the index pin and slowly rotate the workpiece until the pin slides into the next hole in the pulley.
4. Do this six times and put the next mark on the workpiece. The two marks will be spaced  $60^\circ$  apart. Continue this operation until six spokes are marked  $60^\circ$  apart.
5. Spindle turnings can be divided in the same manner.



# How To Use Your RIDGID Wood Lathe

## Woodworking Chisels and How to Use Them



### The Six Commonly Used Chisel Types

#### Selection Of Chisels

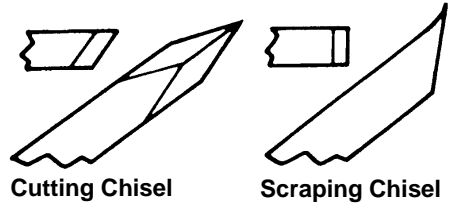
Better chisels have handles approximately 10-in. long, to provide plenty of grip and leverage. Sharp tools are essential for clean, easy work... buy tools that will take and hold keen edges.

sharpened to a razor edge by honing on both sides. The scraping chisels are the flatnose, round nose and spear point. These are not honed on the flat sides - the wire edges produced by grinding are left on to aid in the scraping process.

#### Theory Of Turning

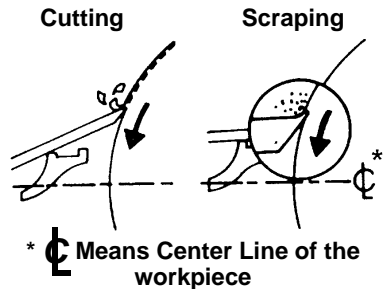
##### The Two Classes of Chisels

These are: 1) Chisels intended primarily for cutting, and 2) chisels used only for scraping. The cutting chisels are the gouge, skew and parting tool. These are the most used. They are commonly



#### Cutting and Scraping

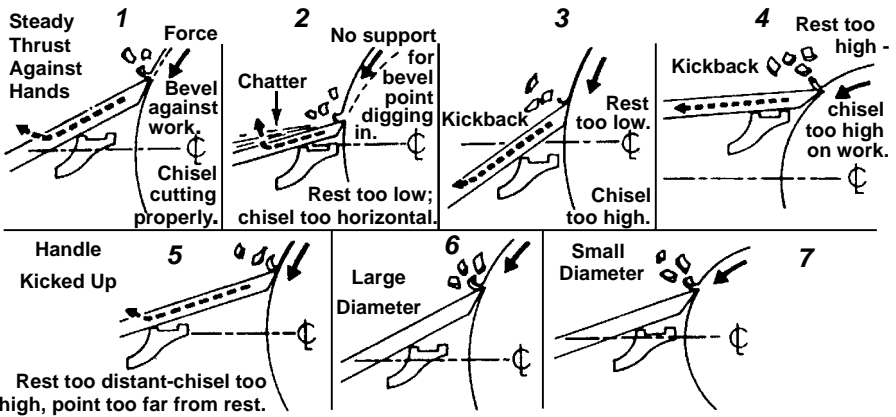
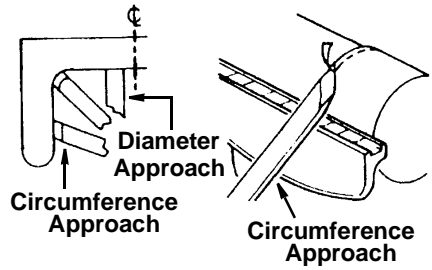
To cut, the chisel is held so that the sharp edge actually digs into the revolving work to peel off shavings. To scrape, the chisel is held at a right angle to the work surface, and removes fine particles instead of shavings. Many operations require that the cutting chisels be used for scraping; but scraping chisels are practically never used for cutting. Scraping dulls a chisel much faster, especially the razor sharp cutting chisels. Cutting is faster than scraping and produces a smoother finish which requires less sanding. However, it is far more difficult to master. Scraping, on the other hand, is far more precise and easier to control.



## When You Can Cut, and When You Must Scrape

There are two different approaches to the work when turning. One approach is toward a circumference of the workpiece (for example, turning down the outer surface of a cylinder or the inner wall of a hollow round box). In this approach, the surface being turned travels under the chisel edge like an endless belt. The second approach is toward the diameter of a workpiece (as when turning the face of a faceplate turning, or the side of a large shoulder on a spindle turning). In this

approach the surface being turned rotates like a disc under the chisel edge. Sometimes the approach will be a combination of both.



Either a cutting or scraping action can be used when the approach is toward a circumference - the shaving is removed like a peeling from a potato. Scraping, only, can be used when the approach is toward a diameter. The reason is obvious when you consider that faceplate turning practically always requires removal of wood across the grain. Wood does not peel easily across the grain, and attempts to use cutting methods will likely result in damage to the work and throwing of the chisel by the work.

It follows that a cutting action is used for the general run of spindle turning operations...while the major part of a faceplate turning is done by the scraping method. When a combination approach is to be used, you will have to judge, by the feel of the work, when to stop cutting and start

scraping. **Never** try to cut when it becomes difficult to hold the chisel against the roughness of the wood grain.

### How to Position Tool Rest for Circumference Cutting

When cutting, the object is to pierce the outer skin of wood to a certain desired depth, then to hold the chisel steady, with the bevel edge parallel to the work circumference, so that it will peel off a shaving at this desired depth. The only sure method of holding the chisel steady is to rest the bevel against the work, as shown in sketch 1. When the tool rest is at the proper height (sketch 1), the chisel can be held with the bevel pressed against the work, and the tool rest will act as a fulcrum to support the chisel against the downward force of the revolving work.

## How To Use Your RIDGID Wood Lathe (continued)

If the rest is placed too low, so that the chisel is held with the bevel out from the work (sketch 2), the cutting edge will continue to dig deeper into the work. It will dig in until the "bite" becomes so deep that your hands have difficulty holding the chisel - then the improperly supported chisel will begin to bounce, or chatter, against the workpiece.

If the rest is placed too low, the chisel must be held extremely high to position the bevel against the work (sketch 3). Then the rest loses most of its value as a fulcrum, and the down ward force of the revolving workpiece tends to kick the chisel back out of your hands.

If the rest is placed too high (sketch 4) and the chisel is correctly positioned for

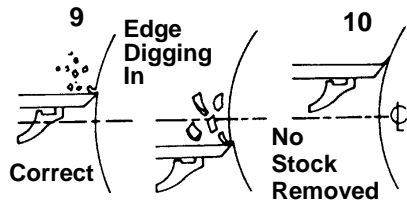
cutting, it strikes the workpiece near the top where the direction of force exerted by the workpiece is nearly horizontal - and kickback will again result.

If the rest is placed too far out from the work surface (sketch 5) - then, when correctly held, the chisel is again too high on the work. Also, you have less leverage on your side of the tool rest - and it is even more difficult to hold the chisel.

With large diameter work (sketch 6), the tool rest can be above the workpiece centerline, and somewhat out from the work surface. With small diameter work (sketch 7), the rest should be lowered almost to the centerline, and should not be far from the work surface. As work grows smaller, the rest should be repositioned.

### How to Position Tool Rest for Circumference Scraping

In scraping operations, the tool rest position is not as critical as it is for cutting operations. The chisel generally is held horizontally, though it can be held at an angle to reach into tight places. Considering that the wire edge of the chisel does the scraping, sketches 9 and 10 show the results of too low or too high a position for the rest; and sketch 8 shows the chisel action with the rest correctly positioned.

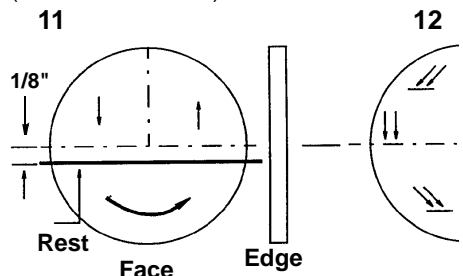


### How to Position Chisel and Rest for Diameter Scraping

When scraping on the diameter, that portion of surface to the right of center is moving upward (sketch 11). If chisel is placed in this area, it will simply be carried up off the rest and out of your hands. All diameter approach operations must be done at the left of center.

Three different chisel contact points are shown in sketch 12. It will be noted that, when chisel is above the workpiece center, or below it, the work surface sweeps past the chisel edge at an angle and tends to carry the chisel in one direction or the other along the rest. Only when the chisel contacts the work on the centerline does the work surface pass squarely

under the chisel edge. This, then, is the position in which it is easiest to hold the chisel steady. To obtain this position, place the rest approximately 1/8-inch (thickness of chisel) below center.



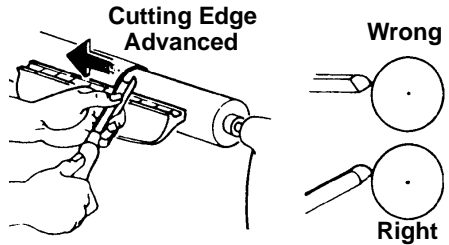


## Using The Gouge

Three gouges, the 1/4-, 1/2- and 3/4-in. sizes, are ample for general homeshop turning; but other sizes from 1/8- to 2-in. can be purchased.

The chief use of the gouge is for rough circumference cutting of raw stock down to a cylinder of working size. It is the best tool to use for rapid cutting away of large areas of the workpiece; but when so used does not produce a smooth surface. With practice, it can be used for cutting coves and the shaping of long cuts - is also useful for scraping.

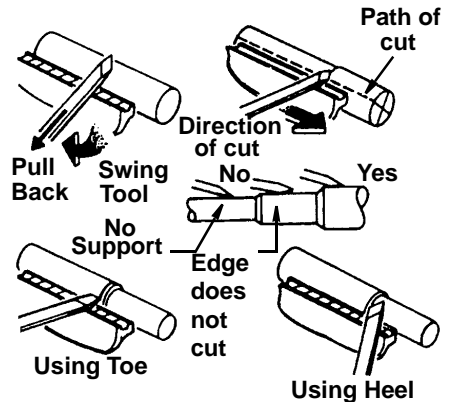
When used for cutting, the gouge is always held with the convex side down. It should be rolled approximately 30° to 45° in the direction in which it is being advanced along the rest; and the cutting edge should be a little in advance of the handle.



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## Using The Skew

Two skews, the 1/2- and 1-in. sizes, are all that are needed for general use. Other sizes are available. This tool is nearly always used to make finish cuts, to cut vees and beads, and to square shoulders. Properly used, it produces the best finish that can be obtained with a chisel. It should be used but little for scraping, as this quickly dulls it. For finish cutting, the skew is held with the cutting edge considerably in advance of the handle, bevel side down. Keep the base of the bevel against the work. Both the toe and the heel of the skew can be used for taking light cuts; but do not penetrate the wood too deeply without cutting clearances, as there is danger of burning the tip of the tool.



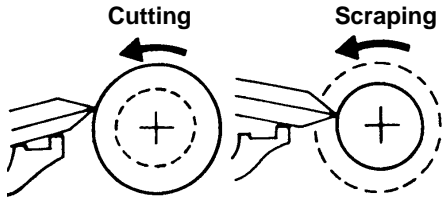
## How To Use Your RIDGID Wood Lathe (continued) ---

### Using The Parting Tool

The parting tool has just one primary purpose: to cut straight into the workpiece as deep as desired, or all the way through to make a cut-off. It is therefore a very narrow tool - 1/8-in. wide - and is shaped to cut its own clearance so that the edge will not be burned. When used for scraping, however, it should be backed off regularly to prevent overheating.

Unlike the gouge and skew, the parting tool is seldom held with the bevel against the work. As the amount of stock removed is small, a support for the bevel is not necessary.

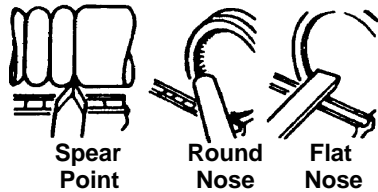
The tool is simply fed into the work at an angle (for cutting), or pointed at the workpiece center (for scraping). It can be held easily in one hand.



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### Using The Scraping Chisels

A 1/2-in. wide spear point chisel, a 1/2-in. wide round nose chisel, and a 1 -in. wide flatnose chisel complete the list of tools ordinarily used by home craftsmen. Each of these scraping chisels can be purchased in various other sizes for special purposes. All are very useful for diameter scraping operations and for circumference scraping when cutting methods cannot be employed. The spear point is used for fine scraping and delicate operations, such as the forming of beads, parallel grooves and shallow vees. Edges and bowl contours can be rounded with the round nose chisel. Any flat surface can be scraped with the flatnose chisel.



## Hand Positions

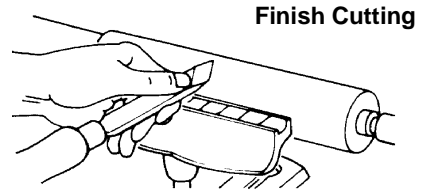
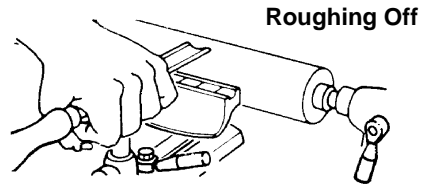
**⚠ WARNING:** Keep firm hold and control of the turning tool at all times. Avoid awkward hand positions where a sudden slip could cause a hand to move into the work-piece.

In handling all of the chisels the handle hand takes a natural position, being nearer or farther from the end depending upon the amount of leverage required. The position of the tool rest hand is a matter of individual liking; but there are two generally accepted positions, each best for certain types of operations.

Roughing-off and other heavy work requires a firm grip and solid positioning of the chisel against the rest. This is best obtained by the tool-rest hand position illustrated. The wrist is dropped down so that the heel of the hand below the little finger acts as a sliding guide against the rest. The handle hand controls chisel position.

Finish cutting requires more control, with less force - and is better done with the palm of the tool-rest hand turned up. The wrist is still held down, and the side of the index finger acts as a guide along the rest. In this position, control of the chisel is shared by both hands, the fingers of the tool-rest hand being free to assist in positioning the tool.

The first and second positions are equally good for scraping or cutting operations.



## How to Use Your RIDGID Wood Lathe (continued)

### Making Standard Cuts

#### The Roughing-off Cut

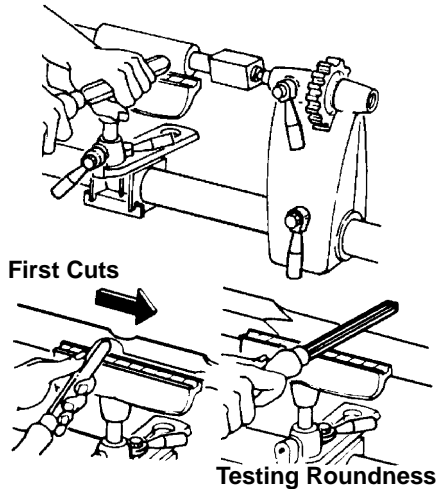
Reducing a square or odd-shaped workpiece down to a cylinder of approximate size for finish turning is called "Roughing-off". Faceplate turning and large diameter spindles should first be partly reduced by sawing but small spindles are easily turned down entirely with the large (3/4-in.) gouge.

Start the first cut about 2-in. from tailstock end - then run it toward the tailstock and off the end of the workpiece. Next, start another cut 2-in. nearer the headstock - and run it, also, toward tailstock, to merge with first cut. Continue in this manner until 2- to 4-in. from the headstock end, then reverse the direction of tool travel and work one or two cuts in succession toward the headstock, and off this end of the workpiece. **NOTE:** Never start a cut directly at the end - if the chisel catches the end, it will damage the workpiece.

Never take long cuts while corners remain on the work, as this tends to tear long slivers from the corners.

The first series of cuts should not be too deep. It is better to partially reduce the work to a cylinder all along its length; then start a second series of cuts to complete reducing it to a cylinder. Once a cylinder

has been formed, step lathe up to the next faster speed. Further reductions in size can now be carried out by cutting as deeply as desired at any spot along the work. At this stage, long cuts, from the center off either end, can also be taken. Roughing-off generally is continued until the cylinder is approximately 1/8-in. larger than the desired finish size. Roundness can be tested by laying the gouge on top of the work - it will not ride up and down when cylinder is perfectly round.



#### Rough-cutting To Size

The roughing-off cut can be made to accurately size the cylinder to a given diameter.

Another method is to make a number of sizing cuts at intervals along the work, then use the gouge to reduce the whole cylinder down to the diameter indicated by these cuts.

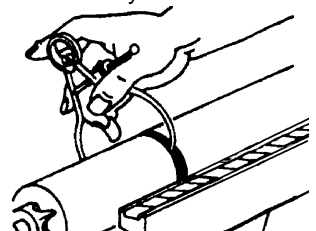
#### Making Sizing Cuts

Sizing cuts are useful to establish approximate finish-size diameters at various points along a workpiece. The work can then be turned down to the diameters indicated - and be ready for finishing. Diameters for sizing cuts should be planned to be about 1/8-in. greater than the desired finish diameters.

A sizing cut is made with the parting tool. Cut "in" with the parting tool. Turn the

lathe off and allow to come to a complete stop. Check the depth of cut with a caliper. Repeat as necessary..

#### Checking Sizing Cut Diameter



## Smoothing A Cylinder

The final 1/8-in. can be removed in two ways. Either use the 1 -in. skew, working from center toward both ends and taking lighter and lighter cuts until finished.

## Cutting A Shoulder

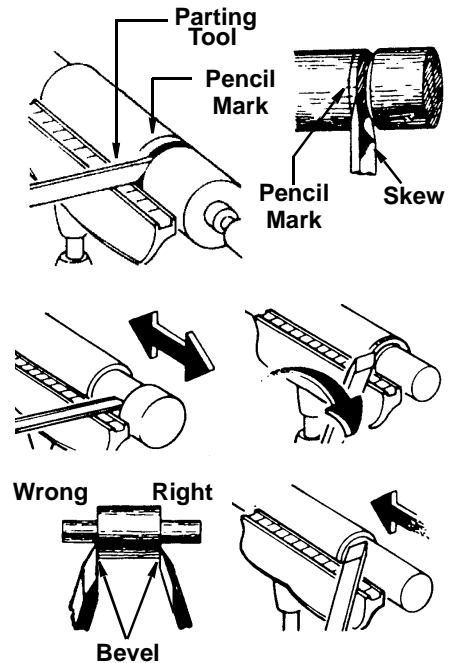
A shoulder can be the side of a square portion left in the workpiece, the side of a turned section, or the end of the workpiece. Most shoulders are perpendicular to work axis; but a shoulder can be at any angle desired.

First, mark position of the shoulder with a pencil held to the revolving workpiece. Then make a sizing cut with the parting tool, placing this cut about 1/16-in. outside the shoulder position, and cutting to within about 1/8-in. of the depth desired for the area outside of the shoulder. If shoulder is shallow, the toe of the skew can be used to make the sizing cut; but do not go in deeper than 1/8-in. with the skew unless wider and wider vees are cut to provide clearance for this tool.

Use the gouge to remove any waste stock outside of shoulder-and smooth this section, up to within 1/8-in. of the shoulder, in usual manner. Finishing of the shoulder, unless it is more than 1 -in. high, is best done with the 1/2-in. skew. First, toe of skew is used to remove thin shavings from the side of the shoulder - down to finish size. Hold skew so that bottom edge of bevel next to shoulder will be very nearly parallel to side of shoulder, but with cutting edge turned away at the top so that only the extreme toe will do the cutting. If cutting edge is flat against shoulder, the chisel will run. Start with handle low, and raise handle to advance toe into the work. Cut down to finished diameter of outside

area; then clean out the corner by advancing heel of the skew into it along the surface of the outside area. Tilt the cutting edge, with handle raised up, so that only the extreme heel does this cutting.

If shoulder is at end of work, the process is called squaring the end. In this case, reduce outer portion to a diameter about 1/4-in. larger than tool center diameter, then later saw off the waste stock.



## How to Use Your RIDGID Wood Lathe (continued)

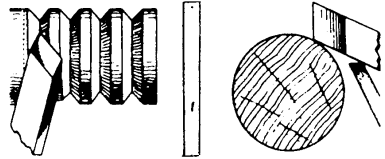
### Cutting Vees

Vee grooves can be cut with either the toe or heel of the skew. When the toe is used, the cutting action is exactly the same as in trimming a shoulder - except that the skew is tilted to cut at the required bevel. Light cuts should be taken on first one side then the other, gradually enlarging the vee to the required depth and width.

When the heel is used, the skew is rotated down into the work, using the rest as a pivot. Otherwise, cutting position and sequence of cuts is the same. As when using the toe, it is important that cutting

be done only by extreme end of cutting edge.

If deep vees are planned, it is quicker to start them by making a sizing cut at the center of each vee. Vees can also be scraped with the spear point chisel or a three-sided file.



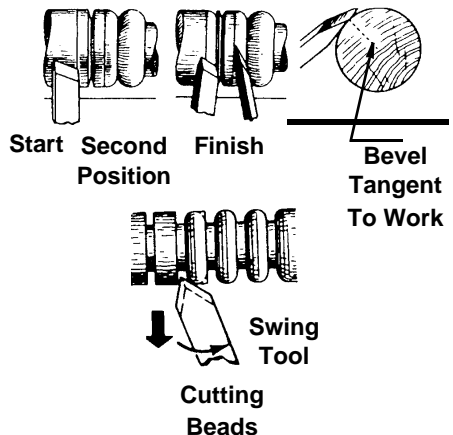
### Cutting Beads

This requires considerable practice. First, make pencil lines to locate the tops (highest points) of two or more adjoining beads. Then make a vee groove at the exact center between two lines - and down to the desired depth of the separation between the beads. Be careful not to make the groove too wide or you will remove portions of the desired beads.

The sides of the two adjoining beads are now cut with the heel of the skew - preferably 1/2-in. size, unless beads are quite large. Place skew at right angles with the work axis, flat against surface and well up near the top. The extreme heel should be just inside the pencil line that marks the top of the bead. Now draw skew straight back while raising handle slowly - until edge of the heel at the pencil line starts to cut. As edge begins to cut, roll skew in the direction of the vee - so that the exact portion of the edge which started cutting will travel in a 90° arc down to bottom of the vee. Upon reaching bottom of the vee, the skew should be on edge. Reverse the movements to cut side of the adjacent bead.

It is important that only the extreme heel should do the cutting. This means that the bottom edge of the bevel next to the vee must at all times be tangent to the arc of the bead being formed.

Easier beads can be shaped with the spear point chisel. Use pencil marks and sizing cuts as before. Push the chisel straight into each cut and rotate it horizontally to round off the adjacent edges. It must be moved slightly in the direction of rotation at the same time, to keep the point from digging into the adjacent bead.



## Cutting Coves (Concaves)

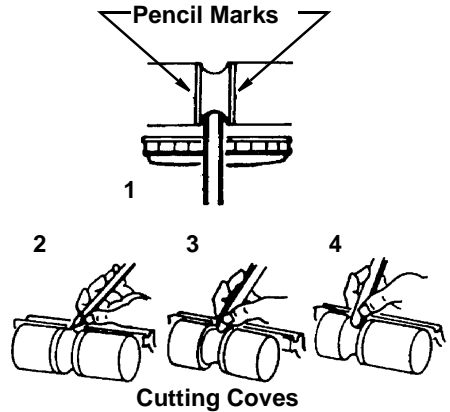
This is the most difficult single cut to master - but one of the most important in good wood turning. First, use pencil marks to indicate the edges. Then, rough it out - to within about 1/8-in. of the desired finish surface - by scraping with the gouge or round nose chisel. If the cove is to be very wide, sizing cuts can be made to plot the roughing out. Once it is roughed out, the cove can be finished in two cuts - one from each side to the bottom center.

At the start of either cut, gouge is held with handle high and the two sides of blade held between the thumb and forefinger of tool-rest hand, just behind the bevel. Position the fingers ready to roll the blade into cove. Hold blade so that bevel is at a 90° angle to the work axis, with point touching the pencil line and pointed into work axis.

From this start, depress point slightly to start cut, then continue to move point down in an arc toward the bottom center of cove - at the same time rolling chisel uniformly so that, at the end of the cut, it will be flat at bottom of the cove. The object is

to keep the extreme point of gouge doing the cutting from start to finish. Reverse movements to cut the opposite side.

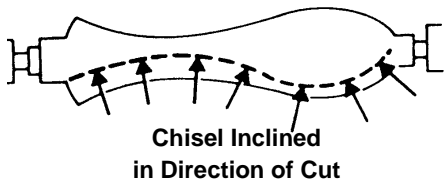
Coves also can be scraped to finish, using the round nose chisel or a rattail file - but these methods do not generally produce perfectly curved coves.



## Making Long Convex Cuts

First turn work down to approximate size, using sizing cuts (as required) to determine various diameters. Finish cut can then be made with either skew or gouge. If the skew is used, the principles of the operation are the same as those employed in cutting a bead - except that curve is longer and may be irregular. Use the extreme heel throughout - start at longer end of curve (if curve is irregular) and progress toward steeper end. If gouge is used, make cut in the same direction. Start with the handle well back of point - swinging handle in the direction of

tool travel to overtake the point, if necessary, when the steep part of the curve is reached. Object is to keep extreme point during the cutting throughout - with bevel as tangent to curve as possible.



# How to Use Your RIDGID Wood Lathe (continued)

## Making Long Taper Cuts

Long taper cuts are made like long convex cuts, with the skew or gouge. However, the angle between the cutting edge and handle is kept constant during the entire cut. The handle is not swung around. Always cut downhill. Do not cut too deeply at the center of the taper.

## How To Handle Spindle Turnings

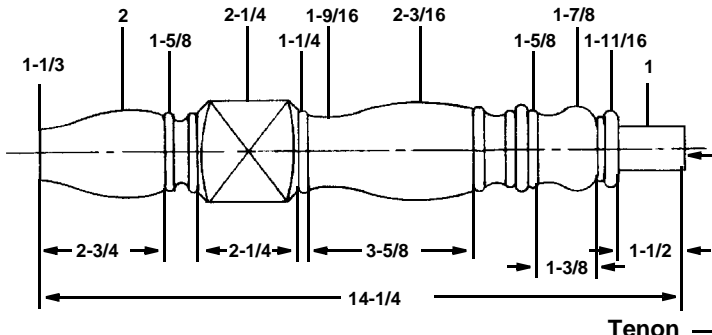
### Plotting The Shape

Once the basic cuts have been mastered, you are ready to turn out finished work. The first step is to prepare a plan for the proposed turning. This can be laid out on a suitable sheet of paper - and should be to full size. Next, prepare the turning stock by squaring it up to the size of the largest square or round section in your plan. The stock can be cut to the exact length of the proposed turning; but, in most cases, it is best to leave the stock a little long at one or both ends to allow for trimming.

Mount the stock in the lathe, and rough it off to a maximum size cylinder. Now project your plan onto the turning by marking the various critical dimensions along the length of the spindle in pencil. These dimensions can be laid out with an ordinary ruler - or by using a template.

Make the pencil marks about 1/2-in. long - they will then be visible when the work is revolved under power, and can be quickly traced around the spindle by touching each line with the pencil.

After marking, use the parting tool to make sizing cuts at all of the important shoulders. When learning, you will find it best to make many sizing cuts to accurately plot the various diameters; but experienced workers can do with a few such cuts at the important shoulders. Plan each sizing cut so that it is in waste stock; and make each deep enough so that there will be just enough wood left under the cut for the finishing process. Once the sizing cuts have been run in, rough-out the excess wood with a gouge - then proceed with the finishing process by making the various types of cuts required.



**NOTE: All Measurements In Inches**



**Sizing Cuts**

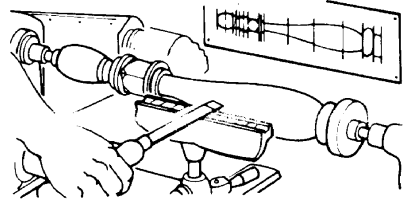
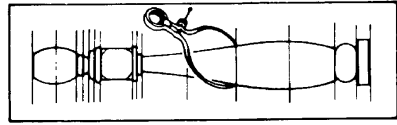


## Duplicate Turnings

Identical turnings require great accuracy when plotting the work and doing the various cuts. Many methods have been devised to aid in perfecting the work.

### Use of Patterns

Professional workers generally use a pattern, or layout board. This is a thin piece of wood or cardboard on which is drawn a full-size half section of the turning. The contour of the finished surface is drawn first; then the diameters at various critical points are drawn to scale as vertical lines intersecting the contour line. By placing the pattern against the roughed-off cylinder, you can quickly mark the various points of the critical diameters. To make each sizing cut, use outside calipers and set these by actually measuring the length of the vertical line on the pattern which represents the diameter desired. Then make the sizing cut, down to the proper diameter by using the calipers to determine when the cut is finished. After making the sizing cuts, hang the pattern behind the lathe where it will serve as a guide for completion of the workpiece.

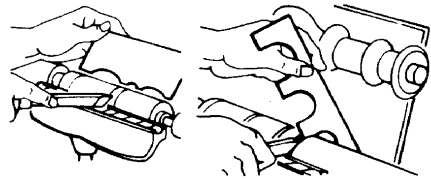


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### Using a Template and a Diameter Board

When many identical turnings are to be produced, it is a convenience to have a prepared template. This can be made of thin wood or cardboard - and is cut on a band saw or scroll saw to have the exact contour of the finished turning. The number one finished turning can also be used as a template. Attach the template to a board; then mount the board behind the lathe, on hinges, so that the template can be moved down to touch the workpiece and allow you to closely observe progress of your work.

If a great many turnings are being produced, a diameter board will save the time used for resetting calipers. This is simply a thin board along the edge of which a number of semicircular cuts have been prepared to represent all the various



Using a Template

Using a  
Diameter Board

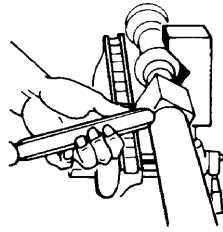
caliper settings required for measuring the sizing cuts. Each semicircular cut is held against the workpiece instead of using the calipers.

## How to Use Your RIDGID Wood Lathe (continued)

### Long Spindles

A long turning can be worked in short sections, with joints arranged to be at shoulders where they will not be noticed.

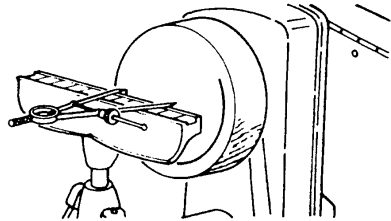
Long thin work that is likely to whip while turning should be supported at one or two places by a backstick. This is easy to make. A simple one consists of a short length of wood mounted vertically in an extra tool rest, and notched so that it can be used to support the spindle from behind.



### Faceplate & Chuck Turnings

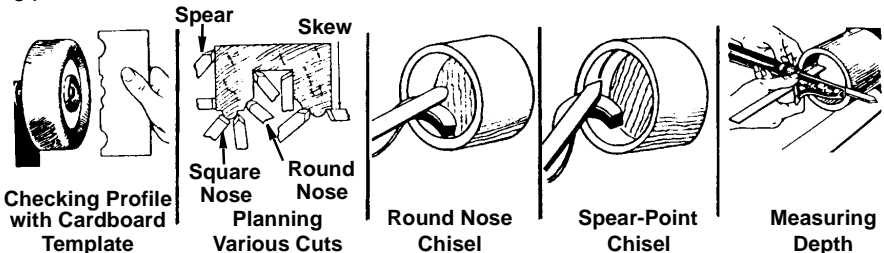
#### Planning The Work

Make a layout first, to provide a visual pattern to follow while working the turning. Patterns can be laid out in the same manner as spindle patterns - or templates can be made which can be held against the work for visual comparison. Circles to locate the various critical points (at which the contours of the faceplate take distinct form) can be quickly scribed on the rotating work by using the dividers.



#### Planning Various Cuts

The circumference of a faceplate turning is roughed-off and finished in the same manner that a spindle is worked. Practically all of the balance of the operations, however, are done by using scraping methods. A few of the standard contours which must often be turned are illustrated in the accompanying sketch - which also shows the proper chisels for shaping these contours. Any roughing-out to depth that must be done is generally accomplished with the gouge held in the scraping position.

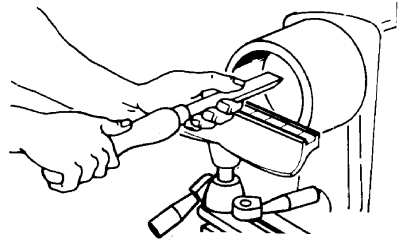
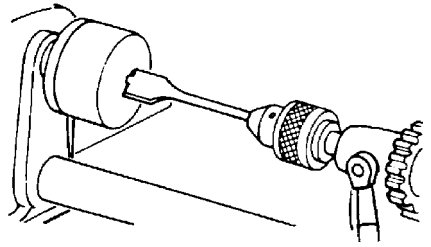


## Deep Recesses

The first step is to remove as much wood as possible by boring into the center with the largest wood bit available. This can be accomplished as illustrated. Be careful to measure in advance the depth to which drill can be allowed to go.

Now remove the bulk of the waste (to rough-out the desired recess) by scraping with the roundnose chisel or the gouge. Remove up to within 1/8-in. of finished size in this manner. Finish off the inside circumference by scraping with the spear-point chisel or skew. Smooth the bottom of the recess by scraping it flat with the flatnose chisel.

Proper support must be provided at all times for the scraping chisels. Several tool rest positions are shown in the accompanying illustrations. Always endeavor to position the part of the rest that supports the tool as close to the working surface as possible.

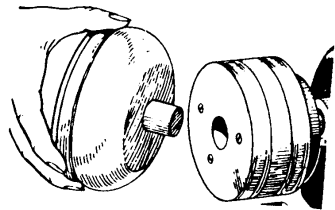
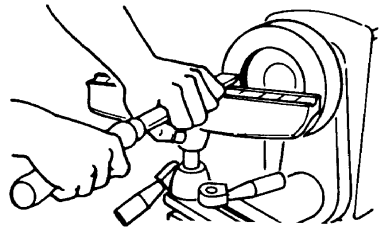


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## How To Make Fancy Faceplate Turnings

### Preparing A Plug Chuck

A plug chuck is an auxiliary wood chuck mounted onto a faceplate. The chuck can be any size in diameter - should be about 2-1/2- in. thick for stability - and should be provided with a 3/4- or 7/8-in. hole in the center for receiving a tenon turned at the end of the workpiece. Once made, such chucks are permanent useful fixtures for turning balls, goblets, etc. In use, the wood stock for turning is turned between centers to produce a tenon at one end which will be a driving fit in the hole of the chuck. When mounted in the chuck, the workpiece is substantially supported for any faceplate type of turning.



## How To Use Your RIDGID Wood Lathe (continued)

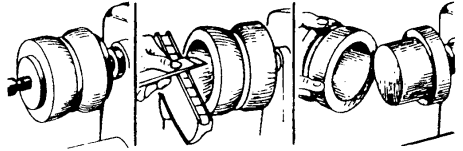
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### Turning Cylinders

Stock for cylinders should be mounted on the screw center or a small faceplate. The tailstock can be brought up to support the work while the circumference is being turned and finished. Afterwards, the tailstock is backed off and the outer end of the cylinder is recessed, using methods already described for making deep recesses.

After making a recess at least 1/2 of the way through the workpiece, and finishing this on the inside, remove the workpiece from the lathe. Now mount a short length of softwood stock on the screw center and

turn this down to form a dowel that will be a tight press (not driving) fit inside the recessed end of the cylinder. Mount the cylinder on this wooden chuck, and recess the unworked end deep enough to form a perfect hole through the entire cylinder.



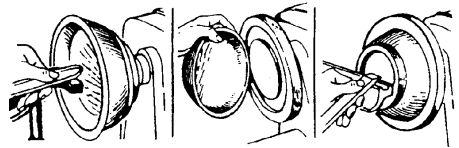
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### Rechucking

Rechucking is the general term used to describe any additional work mounting that is necessary to complete a turning project. The method of working cylinders, and the use of a plug chuck as already described, are typical examples. Another good example is the rechucking of a bowl.

The work is first mounted on a wood backing block secured to the large faceplate, and is turned in the usual manner all except the back side (which is against the mounting block). It is then removed from the mounting block. An auxiliary chuck of softwood is now made in the same manner that the cylinder chuck is

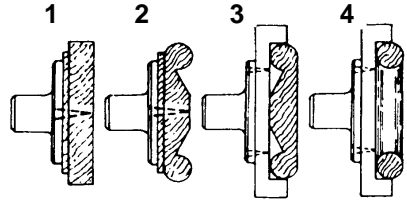
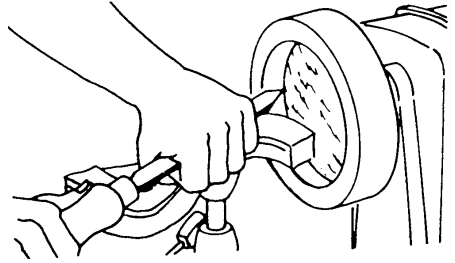
made. This chuck must have a turned recess properly sized to accommodate the rim of the bowl in a tight press fit. When the bowl is mounted in this chuck, the bottom can be cleaned off and slightly recessed to complete the desired contours.



## Turning A Ring

One method of turning a ring requires a spindle chuck. The work stock is first mounted to a backing block held by the large faceplate, and is turned to shape on the outer side. The inside diameter of the ring is also shaped, all the way through to the backing block. The work is then removed from the backing block. A spindle chuck is now prepared so that it will be a tight press fit inside the ring, and the ring is reversed and mounted on this chuck. Thus mounted, the remaining contours can be turned to shape.

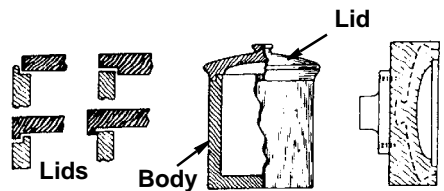
Another method of turning a ring makes use of a recessed chuck. The work stock is mounted on a screw center and one half of the ring is formed; but the ring is not cut away from its center. The stock is then removed, and a recessed chuck - mounted on the large faceplate - is prepared to receive the ring in a tight press fit. After being chucked, the remaining face of the ring can be turned to the proper contour, thus cutting away the center portion. In work of this type take constant measurements - or better still, use a template - to guard against over or under cutting.



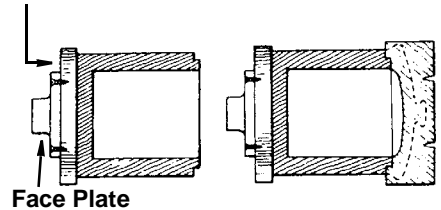
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## Turned Boxes

Turned boxes involve deep recessing together with a special system of working the lid and body of the box together as one unit. The inside of the lid is turned first. Next, the inside of the body is turned. A careful check must be made when turning the lip of the body portion so that the lid will be a tight press fit. The lid is then pressed onto the body and the outer circumference and face of the lid, together with the outer circumference of the body, are turned all at one time. This insures accurate matching of the two pieces. After the work is complete, the tight fit of the lid can be relieved by sanding the lip of the body.



## Backing Block

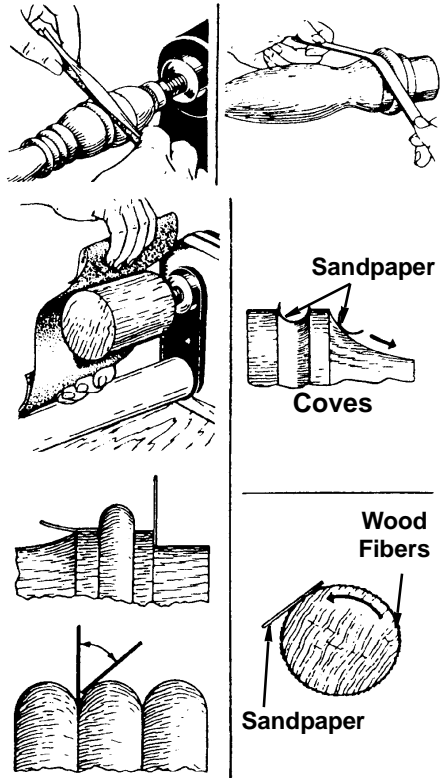


## How to Use Your RIDGID Wood Lathe (continued)

### Sanding, Buffing And Polishing Using The Lathe To Sand Turnings

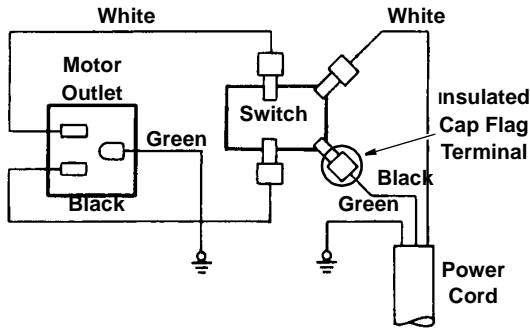
Turnings can be sanded with the lathe running. A large sheet of sandpaper is useful for smoothing cylinders. All other sanding operations are done with a narrow strip of abrasive paper. The application of the sandpaper strip is shown in the illustrations. Care must be exercised in order to prevent dubbing the corners of beads, shoulders, etc.

**⚠ WARNING:** Remove tool rest when sanding to prevent serious personal injury.



## Wiring Diagram

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## Maintenance

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### Maintenance

**⚠ WARNING:** For your own safety, turn switch "OFF" and remove plug from power source outlet before maintaining or lubricating your lathe.

Apply a coat of automobile-type wax to the lathe bed to help the tool rest and tailstock move freely.

Have power cord replaced if it becomes worn or frayed.

### Lubrication

**Periodically lubricate the ram in the tailstock with No. 20 or No. 30 engine oil.**

### Motor Maintenance And Lubrication

1. The bearings, in both end shields of the motor, have been lubricated at the factory with correct lubricant. No other part of the motor requires lubrication.
2. If disassembly of the motor is necessary, it should be returned to your nearest RIDGID Service Center retail store in order to prevent voiding the guarantee.

**NOTE:** The speed of this motor cannot be regulated or changed.

## Recommended Accessories

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Item	Description
Replacement Safety Keys .....	AC1000
Drill Chuck .....	AC2020
Work Arbor.....	AC8010
4" Faceplate.....	AC8040
Bowl Turning Tool Rest.....	AC8070
Her-U-Lift (required purchase of AC9951 - Wood Lathe Extensions for use on the WL1200) .....	AC9950

# Troubleshooting

## General

**⚠WARNING:** For your own safety, turn switch "OFF" and remove plug from power source outlet before trouble shooting.

Trouble	Probable Cause	Remedy
Motor will not run	<ol style="list-style-type: none"><li>1. Defective On-Off switch. Defective switch cord. Defective switch box receptacle.</li><li>2. Motor protector open, (only if your motor is equipped with an overload protector).</li><li>3. Burned out motor.</li><li>4. Index pin engaged.</li></ol>	<ol style="list-style-type: none"><li>1. Replace defective parts before using lathe again.</li><li>2. Reset protector when motor has cooled.</li><li>3. Consult an Authorized Service Center. Any attempt to repair this motor may create a HAZARD unless repair is done by a qualified service technician.</li><li>4. Disengage index pin (see "Getting to Know Your Wood Lathe") section.</li></ol>
Lathe slows down when turning	<ol style="list-style-type: none"><li>1. V-belt is too loose</li></ol>	<ol style="list-style-type: none"><li>1. Adjust belt tension. See "Assembly" Section.</li></ol>
Tailstock rocks back and forth excessively.	<ol style="list-style-type: none"><li>1. Brass adjusting screw is too loose.</li></ol>	<ol style="list-style-type: none"><li>1. Adjust screw. See "Assembly" section.</li></ol>
Bed loose in head-stock	<ol style="list-style-type: none"><li>1. Hex head locking screw not tight.</li></ol>	<ol style="list-style-type: none"><li>1. Tighten hex head locking screw. See "Assembly" section.</li></ol>



## Motor

Trouble	Probable Cause	Remedy
Excessive noise	1. Motor	1. Have motor checked by qualified service technician. Repair service is available at an Authorized RIDGID Service Center.
Motor fails to develop full power. NOTE: LOW VOLTAGE: (Power output of motor decreases rapidly with decrease in voltage at motor terminals. For example, a reduction of 10% in voltage causes a reduction of 19% in maximum power output of which the motor is capable and a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	1. Circuit overloaded with light, appliances and other motors. 2. Undersize wires or circuit too long. 3. General overloading of power company facilities.	1. Do not use other appliances or motors on same circuit when using the lathe. 2. Increase wire sizes, or reduce length of wiring. See "motor Specifications and Electrical Requirements" section. 3. Request a voltage check from the power company.
Motor starts slowly or fails to come up to full speed.	1. Low voltage will not trip relay. 2. Windings burned out or open.	1. Request voltage check from the power company. 2. Have motor repaired or replaced.
Motor overheats	1. Motor overloaded.	1. Take shallower cuts.

## Troubleshooting (continued)

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### Motor (continued)

Trouble	Probable Cause	Remedy
Starting switch in motor will not operate.	<ol style="list-style-type: none"><li data-bbox="317 224 578 370">1. Burned switch contacts (due to extended hold-in periods caused by low line voltage, etc.)</li><li data-bbox="317 370 578 418">2. Shorted capacitor</li><li data-bbox="317 418 578 495">3. Loose or broken connections.</li></ol>	<ol style="list-style-type: none"><li data-bbox="587 224 984 316">1. Have switch replaced and request a voltage check from the power company.</li><li data-bbox="587 370 984 430">2. Have capacitor tested and replace if defective.</li><li data-bbox="587 430 984 462">3. Have wiring checked and repaired.</li></ol>
Motor stalls (resulting in blown fuses or tripped circuit breakers).	<ol style="list-style-type: none"><li data-bbox="317 511 578 571">1. Starting switch not operating.</li><li data-bbox="317 571 578 657">2. Voltage too low to permit motor to reach operating speed.</li><li data-bbox="317 657 578 750">3. Fuses or circuit breakers do not have sufficient capacity.</li></ol>	<ol style="list-style-type: none"><li data-bbox="587 511 984 544">1. Have switch replaced.</li><li data-bbox="587 571 984 630">2. Request voltage check from the power company.</li><li data-bbox="587 657 984 717">3. Install proper size fuses or circuit breakers.</li></ol>
Frequent opening of fuses or circuit breakers.	<ol style="list-style-type: none"><li data-bbox="317 766 578 799">1. Motor overloaded.</li><li data-bbox="317 799 578 885">2. Fuses or circuit breakers do not have sufficient capacity.</li><li data-bbox="317 885 578 977">3. Starting switch not operating (motor does not reach speed).</li></ol>	<ol style="list-style-type: none"><li data-bbox="587 766 984 799">1. Take shallower cuts.</li><li data-bbox="587 799 984 857">2. Install proper size fuses or circuit breakers.</li><li data-bbox="587 885 984 917">3. Have switch replaced.</li></ol>

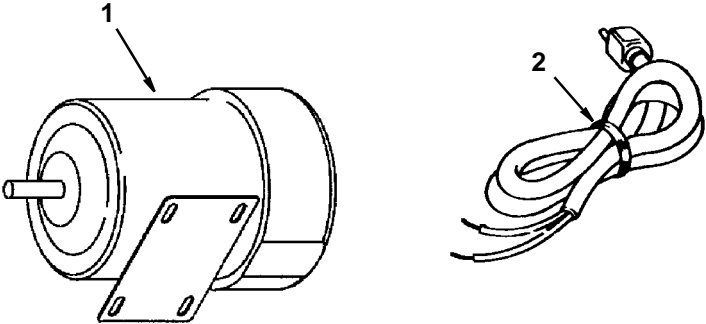
**Repair Parts**

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**RIDGID 12" Wood Lathe  
Model No. WL1200LS1  
Figure 1**

**NOTE:** Any attempt to repair this motor may create a hazard unless repair is done by qualified service technician.

Repair service is available at an Authorized Service Center.

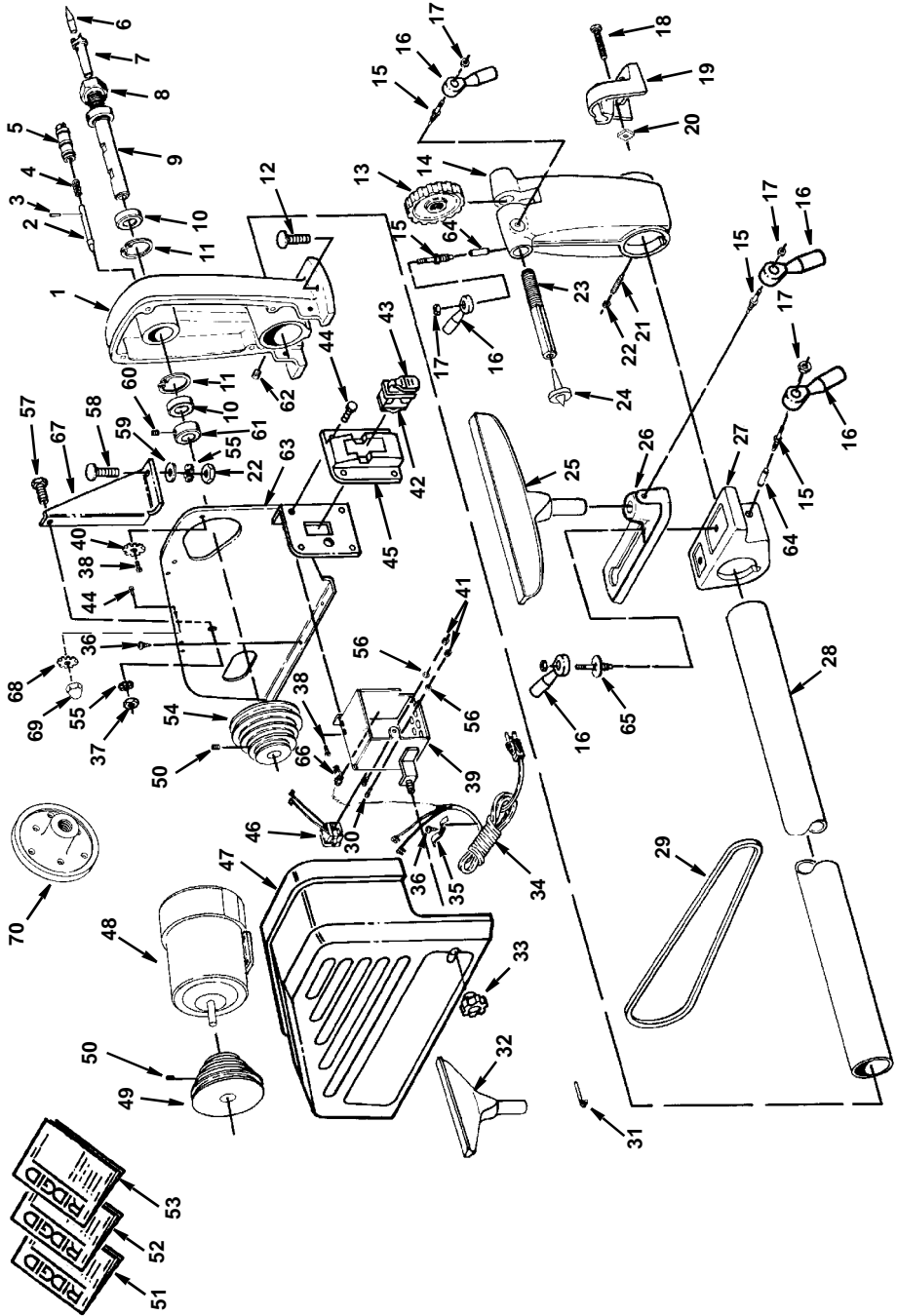


**Always order by Part Number -- Not by Key Number**

Key No.	Part No.	Description
1	828929	Motor
2	830177	Cord, Motor

RIDGID 12" Wood Turning Lathe Model WL1200LS1

Figure 2



# Repair Parts

## RIDGID 12" Wood-Turning Lathe Model No. WL1200LS1 Figure 2

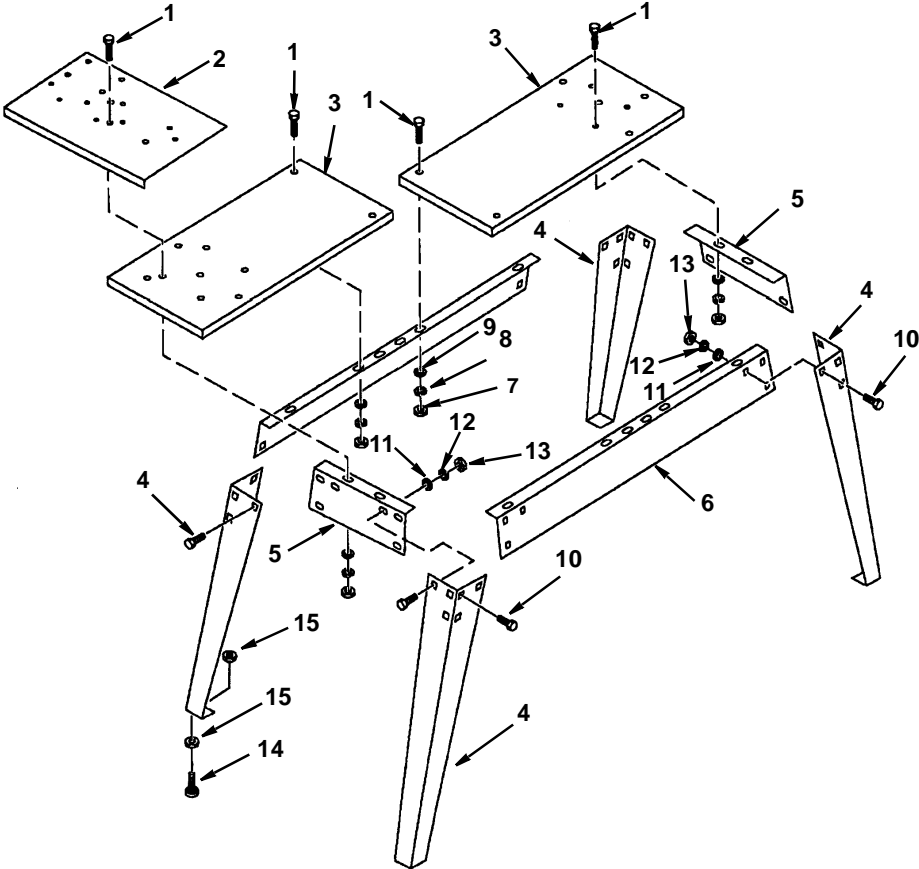
Always order by Part Number -- Not by Key Number

Key No.	Part No.	Description	Key No.	Part No.	Description
1	826550	Headstock	38	826586	* Screw, Pan Hd Ty T M5 x 0.8-12
2	826564	Plunger	39	826606	Box, Junction
3	813249-54	Pin, Roll 2.5-12	40	813314-8	* Lockwasher, Ext M5
4	826563	Spring	41	824026-4	* Nut, Hex M4 x 0.7
5	826562	Housing, Plunger	42	829787	Switch, Locking
6	826584	Center, Point	43	826122	Key Switch
7	826582	Center, Spur	44	817450-7	* Screw, Pan Hd Ty T M4 x .7-8
8	816989	Nut, Hex 3/4-16	45	826396	Bezel, Switch
9	826553	Spindle	46	60341	Outlet
10	826552	Bearing, Ball	47	826599	Guard Asm.
11	826551	Ring, Retaining	48	See Fig. 1	Motor
12	820377-2	Bolt, Carriage M6 x 1.0-65	49	826556	Pulley, 4 Step
13	826560	Wheel, Hand	50	830245	* Screw, Soc Set M8 x 1.25-8
14	828268	Housing, Tailstock	51	SP6489	Operator's Manual
15	826591	Stud, Nut	52	SP6489S	Operator's Manual - Spanish
16	826592	Lever	53	SP6489F	Operator's Manual - French
17	817449-1	Nut, Lock M6 x 1.0	54	826572	Pulley, 4 Step
18	826587	* Screw, Pan Hd. M8 x 1.25-45	55	818826-6	* Lockwasher M6
19	826577	Foot, Rear	56	813163-6	* Lockwasher Int M4
20	820258-4	Nut, Sq. M8 x 1.25	57	820249-6	* Screw, Hex Hd M6 x 1.0-12
21	828180	Screw, SI Set M8 x 1.25-31.75	58	820377-1	Bolt, Cup Hd Sq Neck M6 x 1.0-45
22	820326-7	* Nut, Hex M8 x 1.25	59	820238-7	* Washer, M6
23	826559	Spindle, Tailstock	60	830245	* Screw, Soc Set M8 x 1.25-8
24	AC8020	Center, Live	61	826554	Collar
25	826574	Rest, 12" Tool	62	821750	* Screw, Hex Head M10 x 1.5-30
26	826575	Holder, Tool Rest	63	826605	Plate, Guard
27	826576	Clamp, Support	64	826590	Shoe, Lock
28	826571	Tube Asm	65	826593	Stud, Nut
29	808644	* Belt, V 1/2 x 37	66	830244	Relief, Strain
30	816743-4	* Screw, Pan Cr M4 x 0.7-8	67	826569	Bracket, Plate
31	813317-7	Wrench, Hex L M4	68	818826-4	* Lockwasher, M4
32	826570	Rest, 6" Tool	69	828217	* Nut, Acorn M4
33	826601	Knob, Guard	70	AC8060	Faceplate, 6 In.
34	826607	Cord w/Plug			
35	63418	Clamp, Cord			
36	816743-4	* Screw, Pan Hd M4 x 0.7 x 8			
37	820236-6	Nut Hex M6 x 1.0			

\* Standard Hardware Item - May Be Purchased Locally

RIDGID 12" Wood-Turning Lathe  
Model No. WL1200LS1

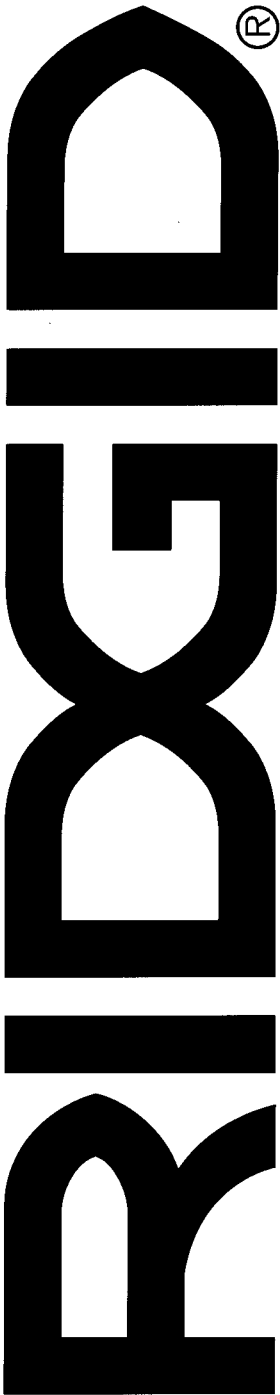
Figure 2



**RIDGID 12" Wood-Turning Lathe****Model No. WL1200LS1****Figure 3****Always order by Part Number -- Not by Key Number**

<b>Key No</b>	<b>Part No.</b>	<b>Description</b>
1	820377-1	Bolt, Rd. Hd. Sq. Neck M6 x 1.0-45
2	826579	Plate, Support
3	826619	Board, Wood Lathe
4	826890	Leg
5	826581	Support, End
6	826580	Support, Side
7	817449-1	* Nut, Hex M6 x 1.0
8	818826-6	* Lockwasher, M6
9	820238-7	* Washer, M6
10	821103	Bolt, Rd. Hd. Sq. Neck M8 x 1.25-16
11	821063-2	* Washer, M8 x 16 x 1.6
12	818826-7	* Lockwasher, M8
13	820236-7	* Nut, Hex M8
14	803835-1	Foot, Leveling
15	805483	* Nut, Hex Jam 3/8-16

\* Standard hardware item - may be purchased locally.



OWT Industries, Inc.  
Hwy. 8  
Pickens, SC 29671

This product is manufactured under license from Ridgid, Inc. by One World Technologies, Inc. All warranty communications should be directed to One World Technologies, Inc. at (toll-free) 1-866-539-1710.

#### 90-DAY SATISFACTION GUARANTEE POLICY

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this RIDGID tool for any reason you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the three year warranty period.

#### WHAT IS COVERED UNDER THE LIMITED THREE YEAR WARRANTY

This warranty covers all defects in workmanship or materials in this RIDGID tool for the three year period from the date of purchase. This warranty is specific to this tool. Warranties for other RIDGID products may vary.

#### HOW TO OBTAIN SERVICE

To obtain service for this RIDGID tool, you must return it, freight prepaid, to an authorized RIDGID service center for hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll-free) 1-866-539-1710 or by logging on to the RIDGID website at [www.ridgidwoodworking.com](http://www.ridgidwoodworking.com). When requesting warranty service, you must present the proof of purchase documentation, which includes a date of purchase. The authorized service center will repair any faulty workmanship, and either repair or replace any defective part, at our option at no charge to you.

#### WHAT IS NOT COVERED

This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized RIDGID service center for hand held and stationary power tools. One World Technologies, Inc. makes no warranties, representations or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

#### ADDITIONAL LIMITATIONS

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. is not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Stock No. WL1200LS Model No. WL1200LS1**  
**Serial No. \_\_\_\_\_** Model and serial numbers may be found under belt guard. You should record serial number in a safe place for future use.

#### QUESTIONS OR COMMENTS?

**CALL 1-866-539-1710**

**[www.ridgidwoodworking.com](http://www.ridgidwoodworking.com)**

**Please have your Model Number and Serial Number on hand when calling.**